



# ***STIC Search Report***

## ***Biotech-Chem Library***

**STIC Database Tracking Number: 178472**

**TO: Alton Pryor  
Location: REM 4A39  
Art Unit: 1616  
February 2, 2006**

**Case Serial Number: 10/637163**

**From: P. Sheppard  
Location: Remsen Building  
Phone: (571) 272-2529**

**sheppard@uspto.gov**

### **Search Notes**

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ACCESS DB # \_\_\_\_\_  
PLEASE PRINT CLEARLY

FEB -2 2006

Scientific and Technical Information Center

SEARCH REQUEST FORM

Requester's Full Name: Altan Pryor Examiner #: 74458 Date: 2/2/06  
Art Unit: 1616 Phone Number: 2-0621 Serial Number: 10/637,163  
Location (Bldg/Room#): REM4A9 (Mailbox #): 4th PL Results Format Preferred (circle): PAPER DISK  
\*\*\*\*\*

To ensure an efficient and quality search, please attach a copy of the cover sheet, claims, and abstract or fill out the following:

Title of Invention: \_\_\_\_\_

Inventors (please provide full names): \_\_\_\_\_

Earliest Priority Date: \_\_\_\_\_

Search Topic:

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known.

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Search claim 1

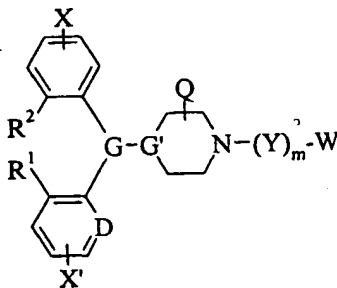
The "W" substituent may be  
1,1,1,1

10/637,163

66

We Claim:

1. A compound of formula I:



I

and the geometrical isomers, enantiomers, diastereomers, and pharmaceutically acceptable salts thereof wherein:

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=> d his ful

(FILE 'HCAPLUS' ENTERED AT 16:21:23 ON 02 FEB 2006)

FILE 'REGISTRY' ENTERED AT 16:33:40 ON 02 FEB 2006

```
L2          STR
L4          1147 SEA SSS FUL L2
L5          STR
L6          STR
L7          STR
L9          1092 SEA SUB=L4 SSS FUL L5 OR L6 OR L7
L10         STR
L11         561 SEA SUB=L9 SSS FUL L10
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FILE 'HCAPLUS' ENTERED AT 16:46:36 ON 02 FEB 2006

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L12         38 SEA ABB=ON PLU=ON L11
           D STAT QUE L12
           D IBIB ABS HITSTR L12 1-38
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FILE 'REGISTRY' ENTERED AT 16:51:19 ON 02 FEB 2006

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L13         531 SEA ABB=ON PLU=ON L9 NOT L11
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FILE 'HCAPLUS' ENTERED AT 17:12:14 ON 02 FEB 2006

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L14         36 SEA ABB=ON PLU=ON L13
L15         31 SEA ABB=ON PLU=ON L14 NOT L12
           D STAT QUE L15
           D IBIB ABS HITSTR L15 1-31
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FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 1 FEB 2006 HIGHEST RN 873294-13-4

DICTIONARY FILE UPDATES: 1 FEB 2006 HIGHEST RN 873294-13-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

```
*****
*
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
*
*****
```

Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

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Pryor 10\_637163- - History

<http://www.cas.org/ONLINE/UG/regprops.html>

FILE HCAPLUS

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FILE COVERS 1907 - 2 Feb 2006 VOL 144 ISS 6

FILE LAST UPDATED: 1 Feb 2006 (20060201/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

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=> fil hcaplus;d stat que l12  
 FILE 'HCAPLUS' ENTERED AT 16:46:36 ON 02 FEB 2006  
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
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Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

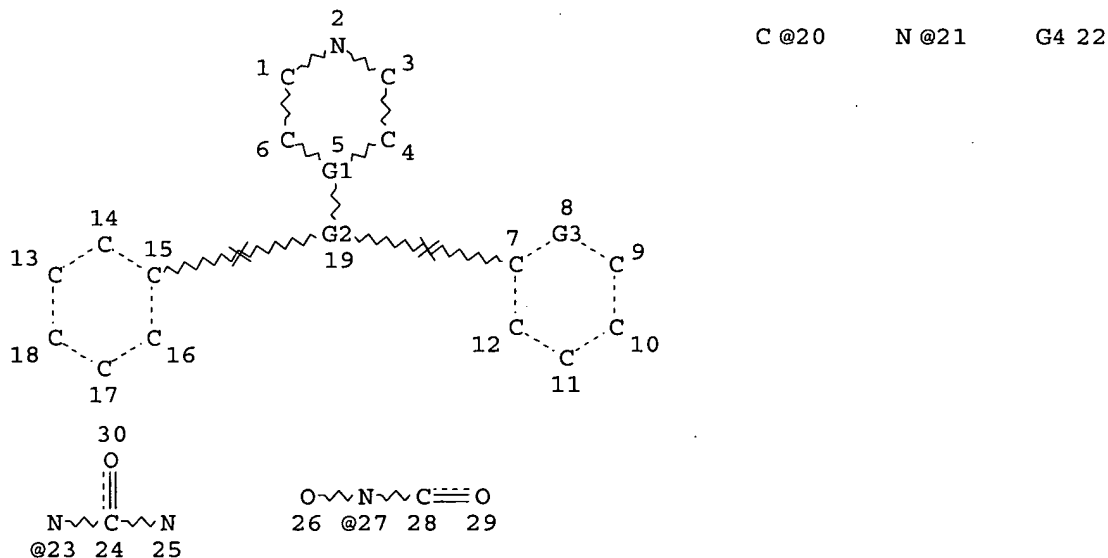
FILE COVERS 1907 - 2 Feb 2006 VOL 144 ISS 6  
 FILE LAST UPDATED: 1 Feb 2006 (20060201/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

L2

STR



VAR G1=C/N  
 VAR G2=20/21  
 VAR G3=CH/N  
 VAR G4=23/27  
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 NSPEC IS RC AT 21  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

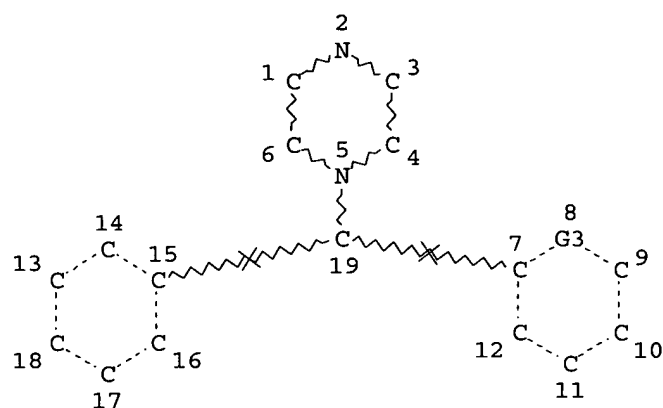
GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 30

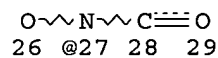
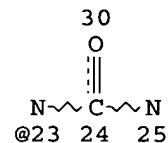
STEREO ATTRIBUTES: NONE

L4 1147 SEA FILE=REGISTRY SSS FUL L2

L5 STR



G4 22



VAR G3=CH/N

VAR G4=23/27

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

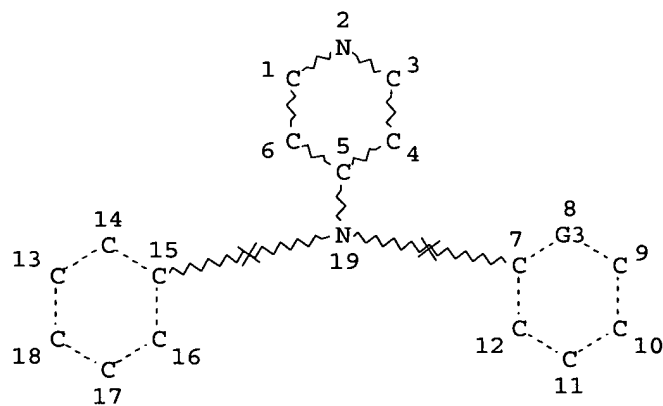
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RING(S) ARE ISOLATED OR EMBEDDED

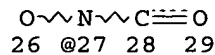
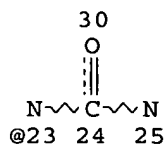
NUMBER OF NODES IS 28

STEREO ATTRIBUTES: NONE

L6 STR



G4 22



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VAR G4=23/27
NODE ATTRIBUTES:
NSPEC   IS RC      AT 19
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

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GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 28

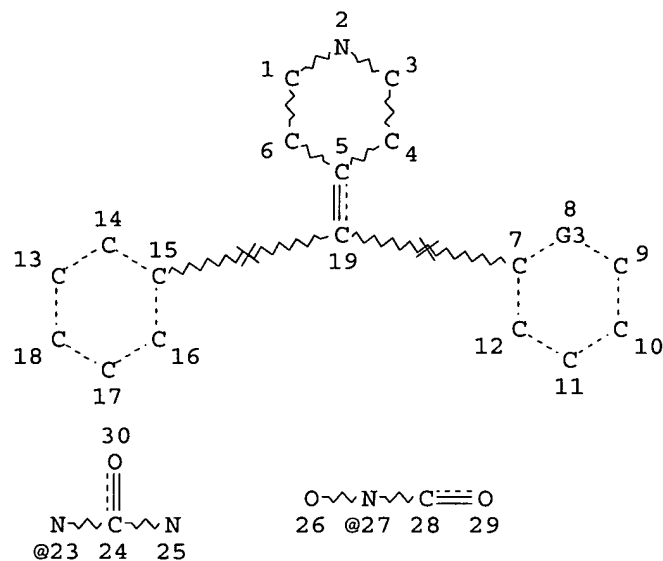
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STEREO ATTRIBUTES: NONE
L7              STR

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G4 22



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VAR G4=23/27
NODE ATTRIBUTES:
NSPEC   IS RC      AT 19
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

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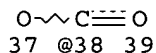
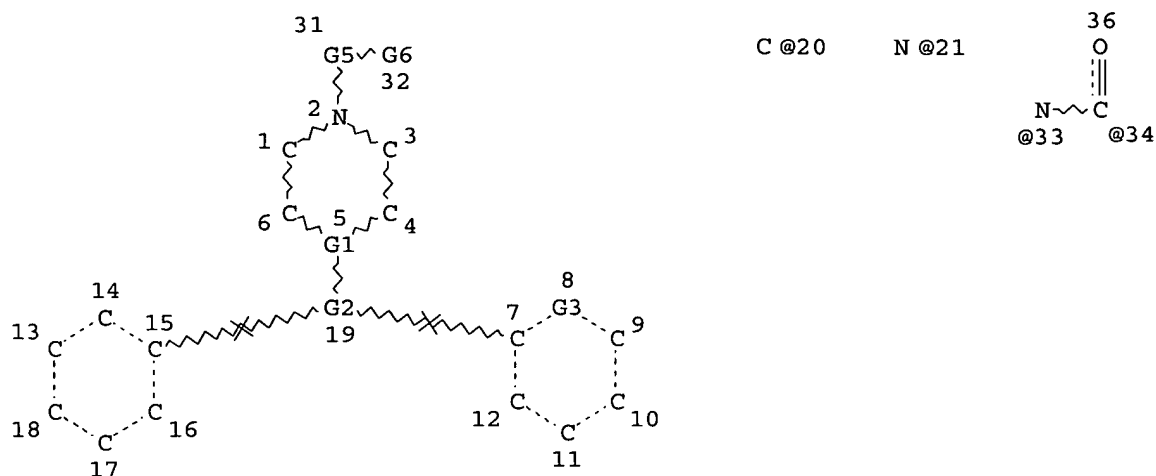
GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 28

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STEREO ATTRIBUTES: NONE
L9              1092 SEA FILE=REGISTRY SUB=L4 SSS FUL L5 OR L6 OR L7
L10             STR

```



```

VAR G1=C/N
VAR G2=20/21
VAR G3=CH/N
REP G5=(0-20) A
VAR G6=33/34/38
NODE ATTRIBUTES:
NSPEC   IS RC      AT  20
NSPEC   IS RC      AT  21
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

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GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  29

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STEREO ATTRIBUTES: NONE
L11      561 SEA FILE=REGISTRY SUB=L9 SSS FUL L10
L12      38  SEA FILE=HCAPLUS ABB=ON  PLU=ON  L11

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=>

=> d ibib abs hitstr l12 1-38

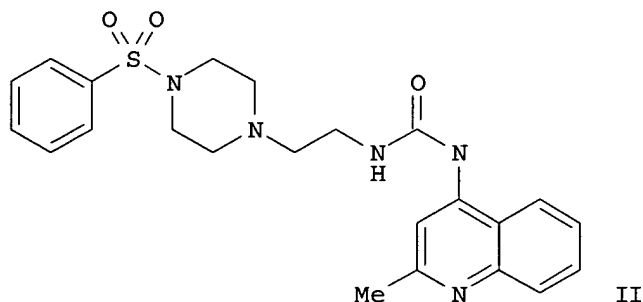
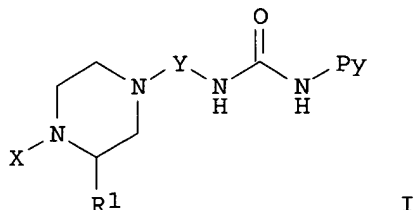
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L12  ANSWER 1 OF 38  HCAPLUS  COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:    2004:996154  HCAPLUS
DOCUMENT NUMBER:     141:410965
TITLE:               Preparation of 1-(piperazinylalkyl)-3-quinolinylurea
                    derivatives as urotensin II antagonists
INVENTOR(S):         Aissaoui, Hamed; Binkert, Christoph; Clozel, Martine;
                    Mathys, Boris; Mueller, Claus; Nayler, Oliver; Scherz,
                    Michael; Velker, Jorg; Weller, Thomas
PATENT ASSIGNEE(S):  Actelion Pharmaceuticals Ltd, Switz.
SOURCE:              PCT Int. Appl., 63 pp.
                    CODEN: PIXXD2

```

DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004099179	A1	20041118	WO 2004-EP4716	20040504
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2523566	AA	20041118	CA 2004-2523566	20040504
PRIORITY APPLN. INFO.:			WO 2003-EP304774	A 20030507
			WO 2004-EP4716	W 20040504
OTHER SOURCE(S):		MARPAT 141:410965		
GI				



AB Title compds. I [wherein Py = (un)substituted pyridinyl, quinolinyl; X = (un)substituted aryl(alkyl), alkylsulfonyl, aryl(alkyl)sulfonyl, (aryl)alkanoyl, aroyl, substituted carbamoyl; Y = CR<sub>4</sub>R<sub>5</sub>CH<sub>2</sub>, CH<sub>2</sub>CR<sub>4</sub>R<sub>5</sub>; R<sub>1</sub> = H, Me; R<sub>4</sub> = H, (aryl)alkyl, aryl; R<sub>5</sub> = H, Me; or CR<sub>4</sub>R<sub>5</sub> = carbocyclic ring; and enantiomers, diastereomers, racemates, pharmaceutically acceptable salts, solvate complexes, and morphol. forms thereof] were prepared as neurohormonal antagonists. For example, II was synthesized in four steps starting from 4-amino-2-methylquinoline, 2-chloroethyl isocyanate, piperazine-1-carboxylic acid tert-Bu ester, and benzenesulfonyl chloride (no data for intermediates). In binding assays of human [125I]-urotensin

II to human-derived TE-671 rhabdomyosarcoma cells, compds. of the invention showed activity with IC50 values ranging from 10 nM to 1000 nM. Thus, I and their pharmaceutical compns., optionally comprising other pharmacol. active compds., are useful for treating a variety of disorders associated with dysregulation of urotensin II, such as heart disease, hypertension, kidney disease, diabetes, asthma, and pulmonary disease (no data).

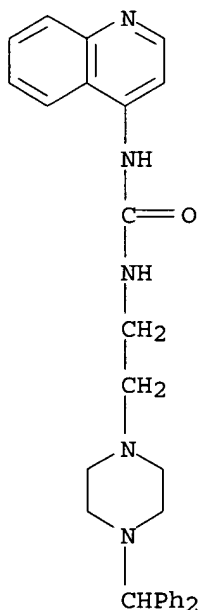
IT 791816-46-1P, 1-[2-(4-Benzhydrylpiperazin-1-yl)ethyl]-3-(quinolin-4-yl)urea

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(urotensin II antagonist; preparation of (piperazinylalkyl)(quinolinyl)urea derivs. as urotensin II antagonists for treatment of heart disease, hypertension, kidney disease, diabetes, asthma, pulmonary disease, and other disorders)

RN 791816-46-1 HCAPLUS

CN Urea, N-[2-[4-(diphenylmethyl)-1-piperazinyl]ethyl]-N'-4-quinolinyl- (9CI)  
(CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 2 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:559502 HCAPLUS

DOCUMENT NUMBER: 141:190802

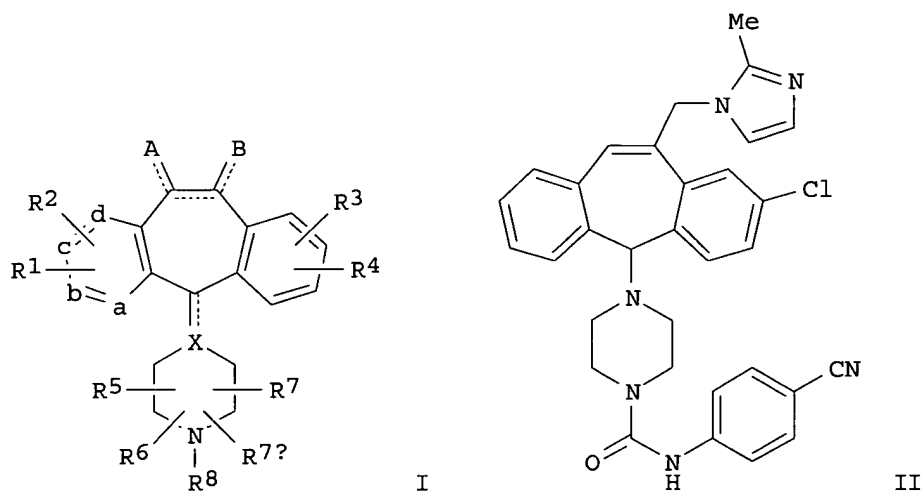
TITLE: Preparation of tricyclic antitumor compounds as farnesyl protein transferase inhibitors

INVENTOR(S): Zhu, Hugh Y.; Njoroge, F. George; Cooper, Alan B.; Guzi, Timothy; Rane, Dinanath F.; Minor, Keith P.; Doll, Ronald J.; Girijavallabhan, Viyyoor M.; Santhanam, Bama; Pinto, Patrick A.; Vibulbhan, Bancha; Keertikar, Kartik M.; Alvarez, Carmen S.; Baldwin, John J.; Li, Ge; Huang, Chia-yu; James, Ray A.; Bishop, W. Robert; Wang, James J.-S.; Desai, Jagdish

A.  
 PATENT ASSIGNEE(S): Schering Corporation, USA  
 SOURCE: U.S. Pat. Appl. Publ., 731 pp., Cont.-in-part of U.S. Ser. No. 85,896.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 6  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004122018	A1	20040624	US 2002-325896	20021219
US 2002198216	A1	20021226	US 2001-940811	20010828
US 2003229099	A1	20031211	US 2002-85896	20020227
US 2004122018	A1	20040624	US 2002-325896	20021219
PRIORITY APPLN. INFO.:			US 2001-940811	A2 20010828
			US 2002-85896	A2 20020227
			US 2002-325896	A 20021219
			US 2000-229183P	P 20000830

GI



AB Title benzo[5,6]cyclohepta[1,2-b]pyridines and analogs (I) [wherein one of a, b, d, e = N, N=O; remaining a, b, d, e = C substituted with R1 or R2; or each a, b, d, e = C substituted with R1 or R2; X = N, C, CH; A, B = independently H, (un)substituted R9, carbamoyl(alkyl), amino(alkyl), acylamino(alkyl), ureido(alkyl), etc.; R1-R4 = independently H, halo, CF3, alkoxy, amino, NO2, CN, alkyl, alkenyl, alkynyl, etc.; R5-R7a = independently H, CF3, acyl, alkyl, aryl; R8 = H, alkoxy, carbonyl, aryloxy, carbonyl, alkylsulfonyle, arylsulfonyle, etc.; R9 = (un)substituted heteroaryl(alkyl), arylalkoxy, heterocyclyl(alkyl), etc.; and stereoisomers, pharmaceutically acceptable salts, solvates, and prodrugs thereof] were prepared as farnesyl protein transferase (FPT) inhibitors. For example, a multi-step synthesis starting from tert-Bu 4-[8-chloro-6-(hydroxymethyl)-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-1-piperazinecarboxylate, 2-methylimidazole, and p-cyanophenyl isocyanate gave (S)-II. The latter inhibited tumor growth of mouse H-Ras fibroblasts, HTB-177 human non-small cell lung cancer cells, and LOX human melanoma cells by 98% (60 MPK, p.o., BID, x2), 96% (80 MPK, p.o., BID,

x3), and 90.3% (60 MPK, p.o., BID, x1), resp. Compds. of the invention inhibited FPT activity with IC50 values in the range of 0.05 nM to 100 nM and suppressed anchorage-independent growth of human tumor cells in a soft agar assay with IC50 values in the range of <0.5 nM to 50 nM. Thus, I and their pharmaceutical compns. are useful for the treatment of proliferative diseases, such as cancer.

IT 592553-84-9P 592553-85-0P 592553-86-1P  
 592553-87-2P 592553-92-9P 592553-93-0P  
 592553-98-5P 592554-00-2P 592554-01-3P  
 592554-02-4P 592554-03-5P 592554-34-2P  
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RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

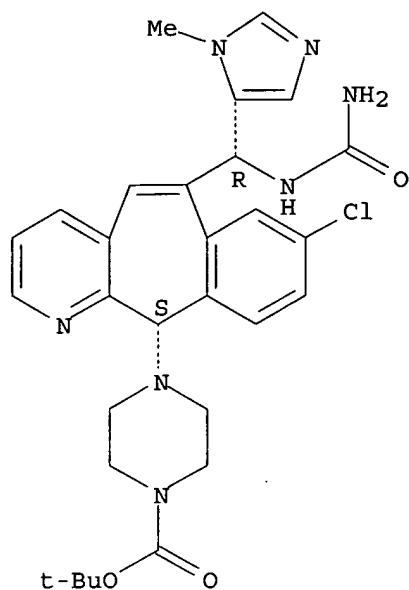
(FPT inhibitor; preparation of tricyclic antitumor agents as farnesyl protein transferase inhibitors for treatment of cancer and other proliferative diseases)

RN 592553-84-9 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

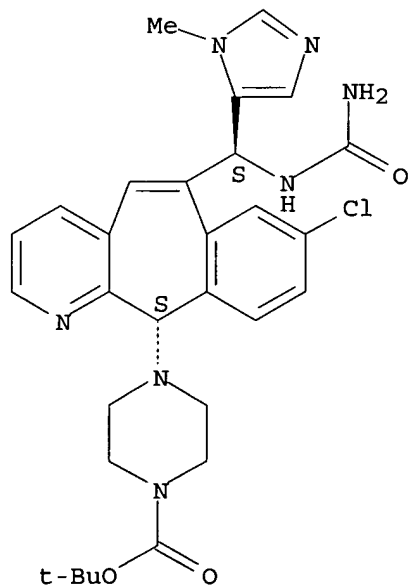




RN 592553-85-0 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino] (1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

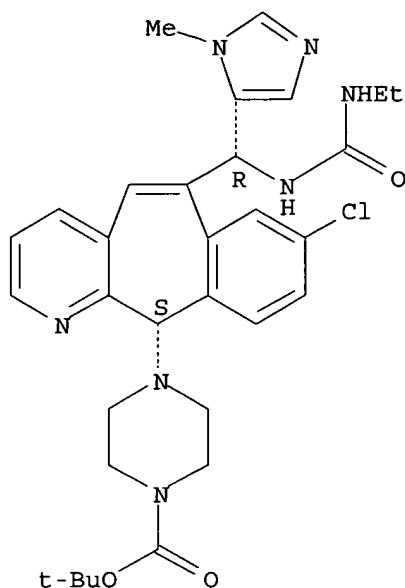
Absolute stereochemistry.



RN 592553-86-1 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(R)-[(ethylamino)carbonyl]amino] (1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

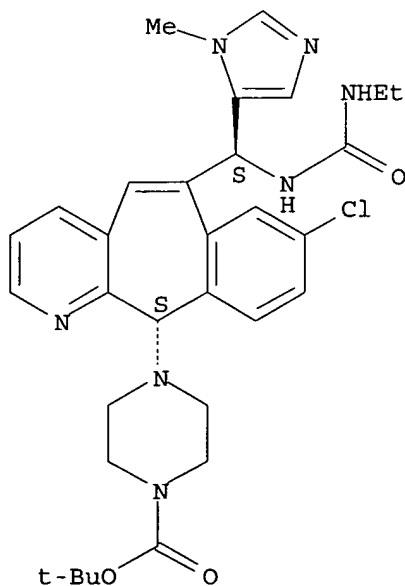
Absolute stereochemistry.



RN 592553-87-2 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(S)-  
 [(ethylamino)carbonyl]amino] (1-methyl-1H-imidazol-5-yl)methyl]-11H-  
 benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1,1-dimethylethyl ester (9CI)  
 (CA INDEX NAME)

Absolute stereochemistry.

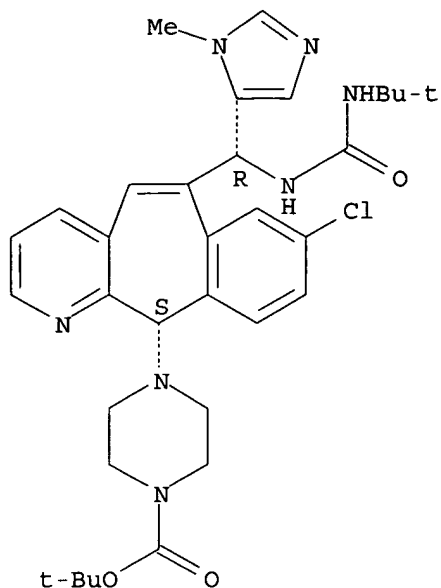


RN 592553-92-9 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-  
 dimethylethyl)amino]carbonyl]amino] (1-methyl-1H-imidazol-5-yl)methyl]-11H-  
 benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1,1-dimethylethyl ester,

stereoisomer (9CI) (CA INDEX NAME)

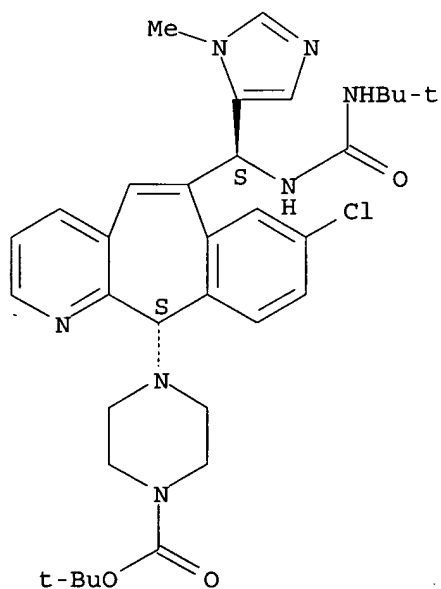
Absolute stereochemistry.



RN 592553-93-0 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(S)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1,1-dimethylethyl ester (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.



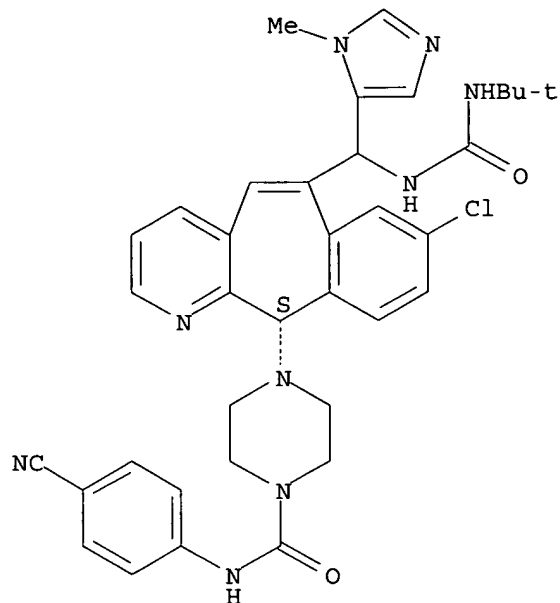
RN 592553-98-5 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[[[(1,1-

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dimethylethyl)amino]carbonyl]amino] (1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-cyanophenyl)- (9CI) (CA INDEX NAME)

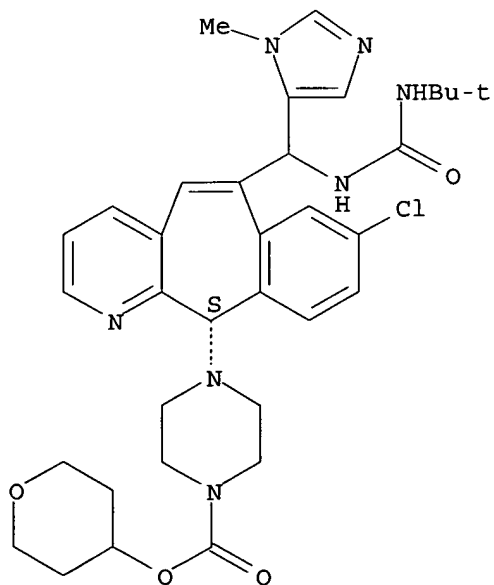
Absolute stereochemistry.



RN 592554-00-2 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[[[(1,1-dimethylethyl)amino]carbonyl]amino] (1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, tetrahydro-2H-pyran-4-yl ester (9CI) (CA INDEX NAME)

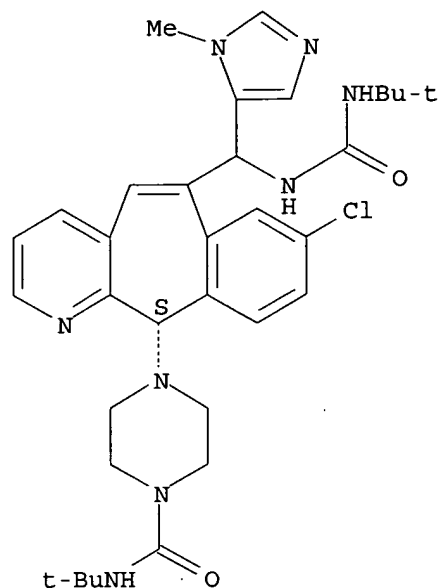
Absolute stereochemistry.



RN 592554-01-3 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(1,1-dimethylethyl)- (9CI)  
(CA INDEX NAME)

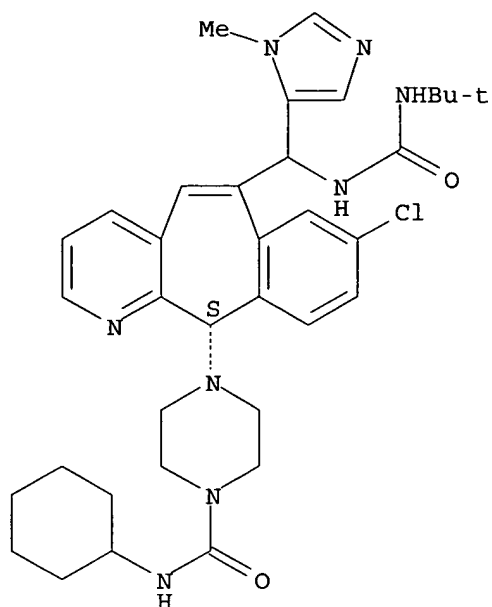
Absolute stereochemistry.



RN 592554-02-4 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-cyclohexyl- (9CI) (CA INDEX NAME)

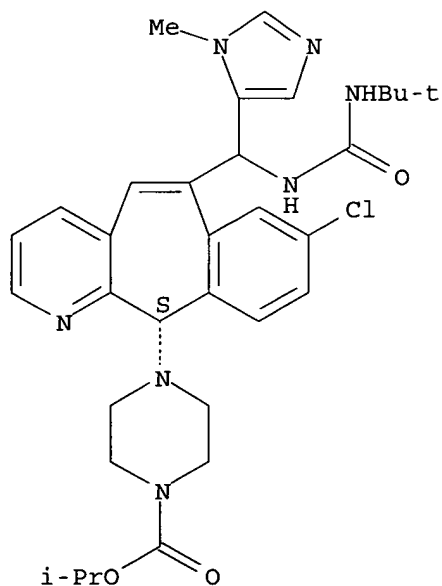
Absolute stereochemistry.



RN 592554-03-5 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1-methylethyl ester (9CI) (CA INDEX NAME)

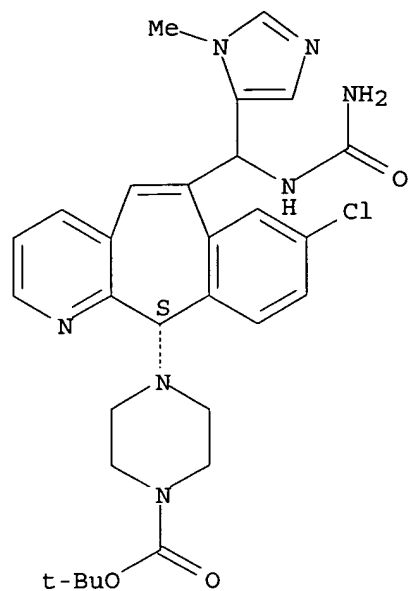
Absolute stereochemistry.



RN 592554-34-2 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-6-[[[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

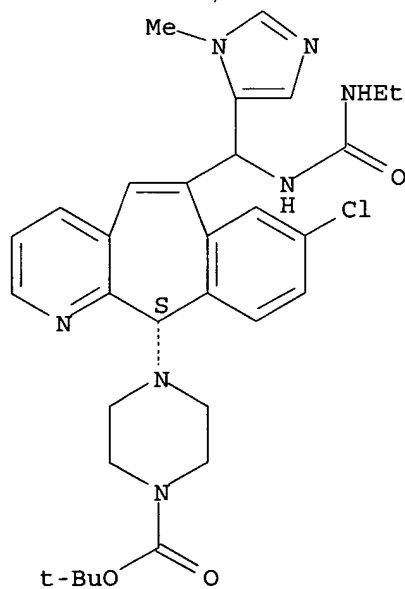
Absolute stereochemistry.



RN 592554-35-3 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-  
[[[(ethylamino)carbonyl]amino] (1-methyl-1H-imidazol-5-yl)methyl]-11H-  
benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1,1-dimethylethyl ester (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.



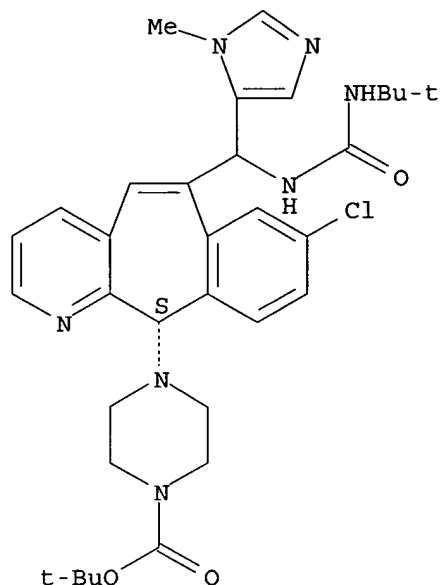
RN 592554-38-6 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[[[(1,1-  
dimethylethyl)amino]carbonyl]amino] (1-methyl-1H-imidazol-5-yl)methyl]-11H-

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benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1,1-dimethylethyl ester (9CI)  
(CA INDEX NAME)

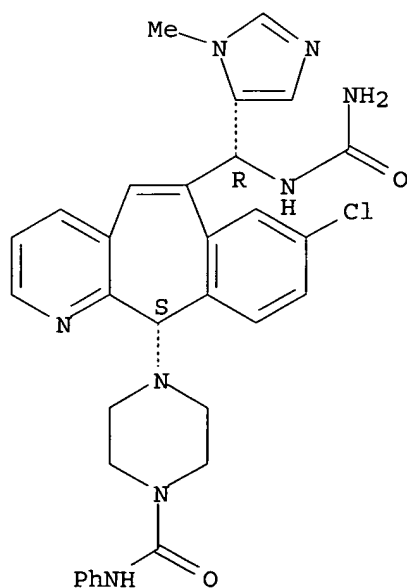
Absolute stereochemistry.



RN 740824-33-3 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(1S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-phenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



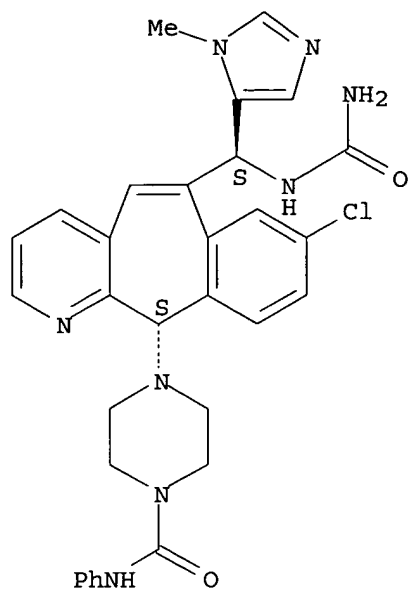
RN 740824-34-4 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(1S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-phenyl- (9CI) (CA INDEX NAME)



1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-phenyl- (9CI) (CA INDEX NAME)

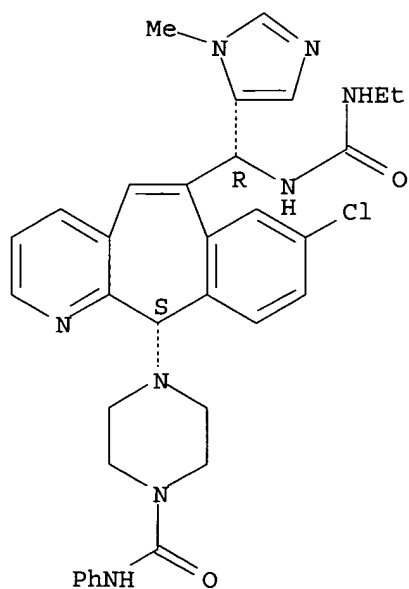
Absolute stereochemistry.



RN 740824-35-5 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[(ethylamino)carbonylamino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-phenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



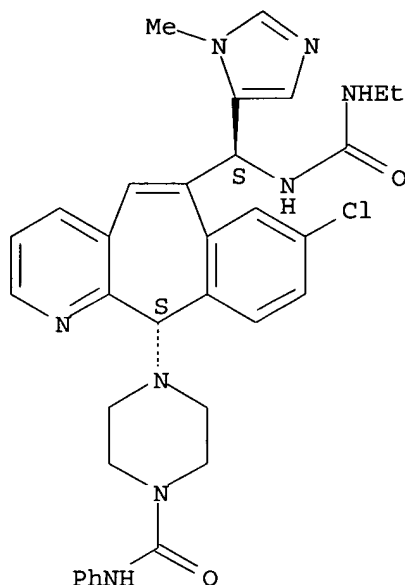
RN 740824-36-6 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-

Pryor 10\_637163

[[ (ethylamino) carbonyl] amino] (1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-phenyl- (9CI) (CA INDEX NAME)

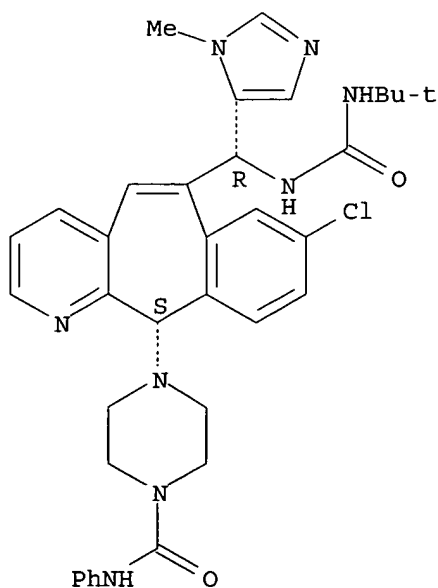
Absolute stereochemistry.



RN 740824-41-3 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-phenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

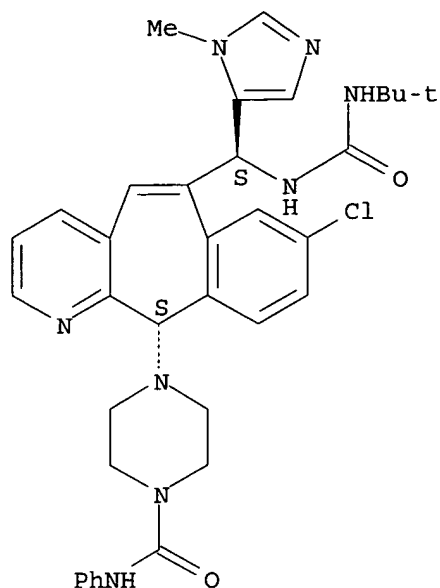


RN 740824-42-4 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-[[[(1,1-

dimethylethyl) amino] carbonyl] amino] (1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-phenyl- (9CI) (CA INDEX NAME)

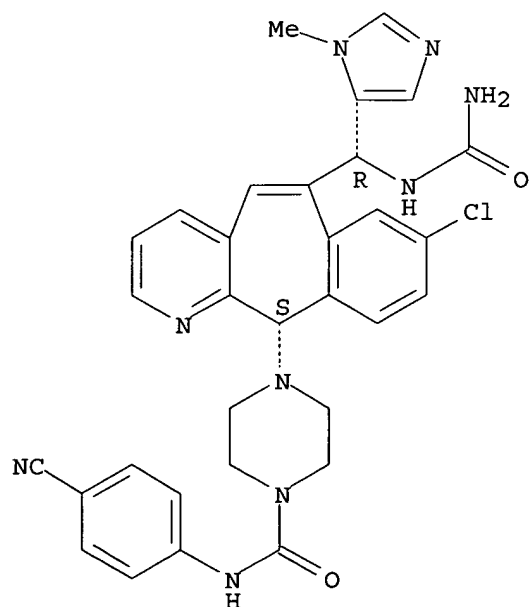
Absolute stereochemistry.



RN 740824-45-7 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-cyanophenyl)- (9CI) (CA INDEX NAME)

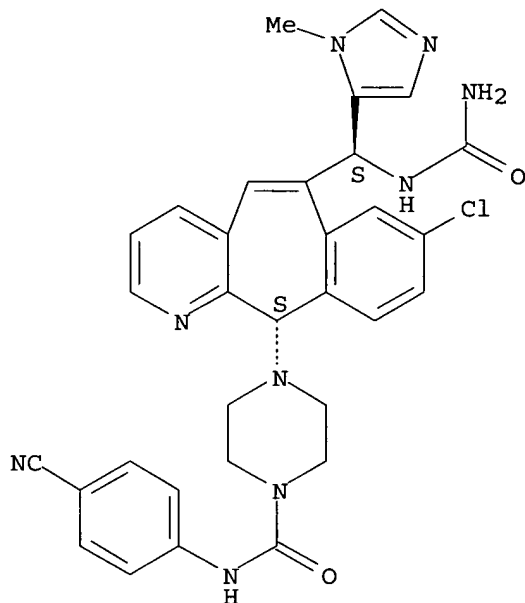
Absolute stereochemistry.



RN 740824-46-8 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-cyanophenyl)- (9CI) (CA INDEX NAME)

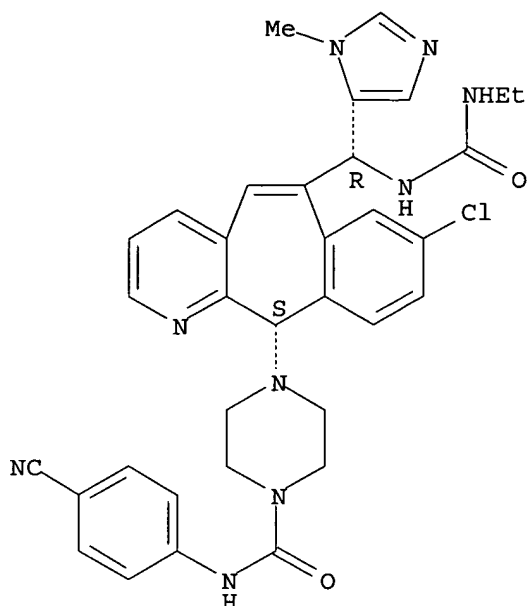
Absolute stereochemistry.



RN 740824-47-9 HCAPLUS

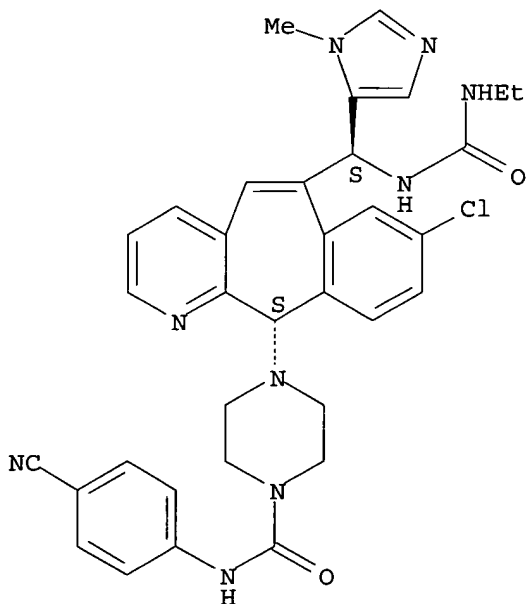
CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-cyanophenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 740824-48-0 HCAPLUS  
 CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-  
 [[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-  
 benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-cyanophenyl)- (9CI) (CA  
 INDEX NAME)

Absolute stereochemistry.

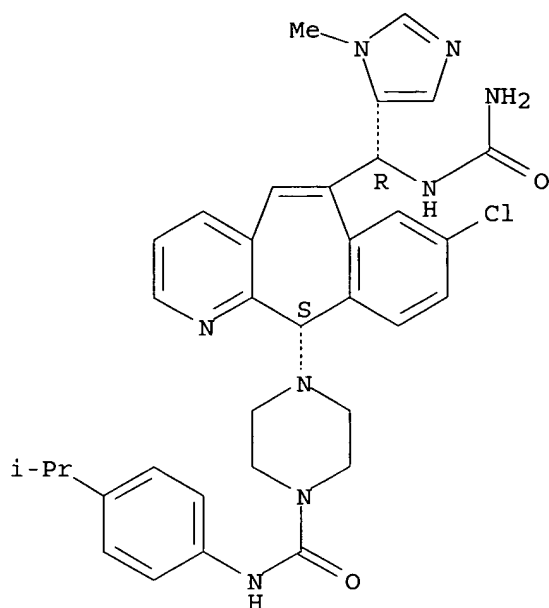


RN 740824-63-9 HCAPLUS  
 CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-  
 1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-

Pryor 10\_637163

11-yl]-N-[4-(1-methylethyl)phenyl]- (9CI) (CA INDEX NAME)

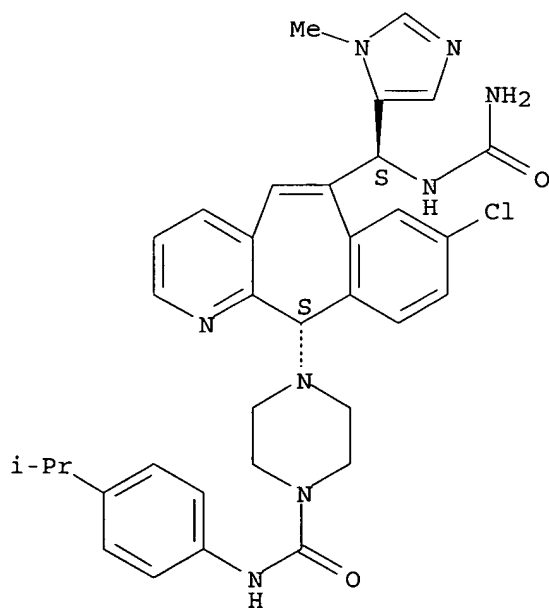
Absolute stereochemistry.



RN 740824-64-0 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[4-(1-methylethyl)phenyl]- (9CI) (CA INDEX NAME)

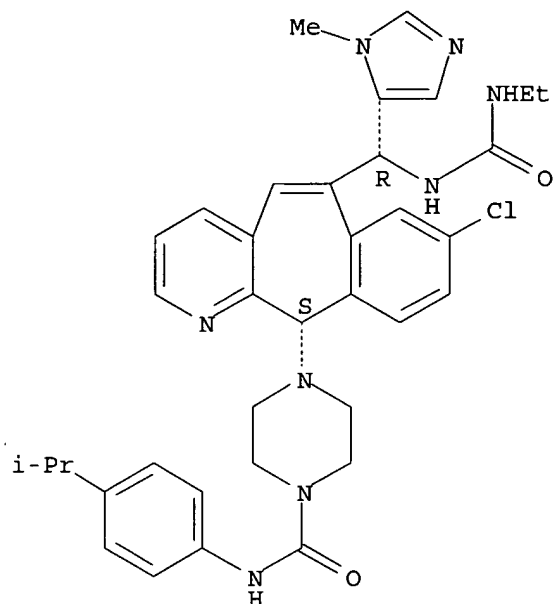
Absolute stereochemistry.



RN 740824-65-1 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-  
 [[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-  
 benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[4-(1-methylethyl)phenyl]-  
 (9CI) (CA INDEX NAME)

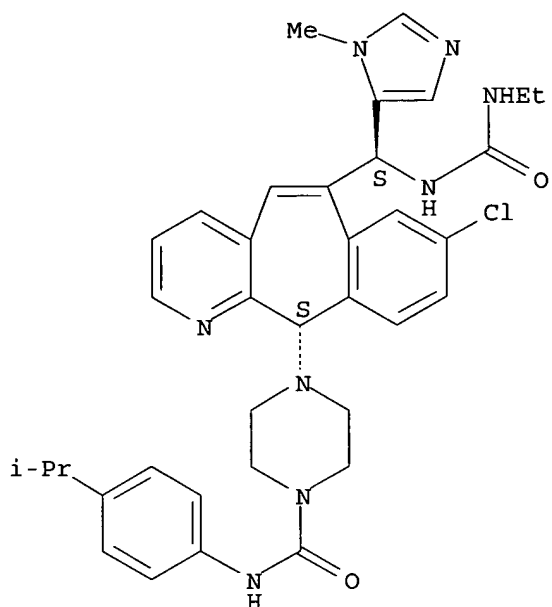
Absolute stereochemistry.



RN 740824-66-2 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-  
 [[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-  
 benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[4-(1-methylethyl)phenyl]-  
 (9CI) (CA INDEX NAME)

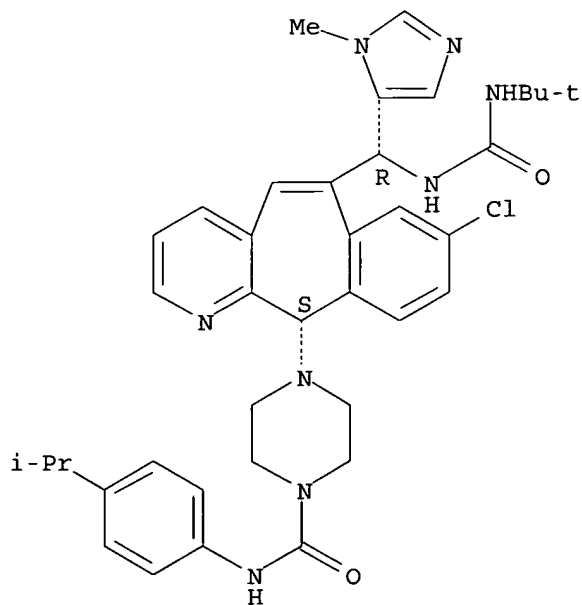
Absolute stereochemistry.



RN 740824-70-8 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[4-(1-methylethyl)phenyl]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



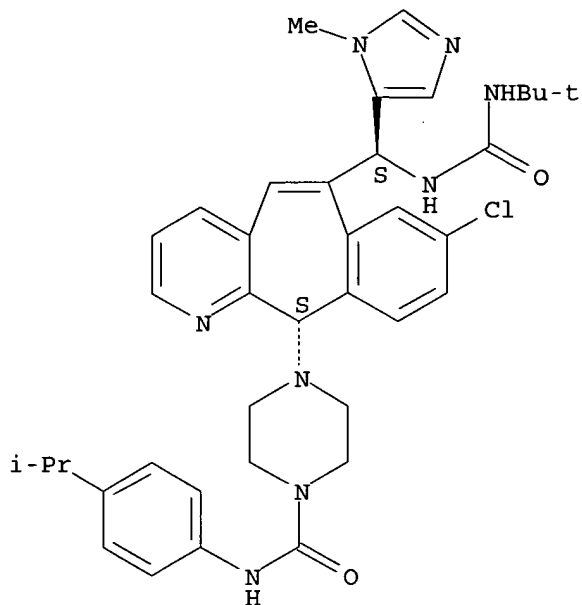
RN 740824-71-9 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-



benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[4-(1-methylethyl)phenyl]-  
(9CI) (CA INDEX NAME)

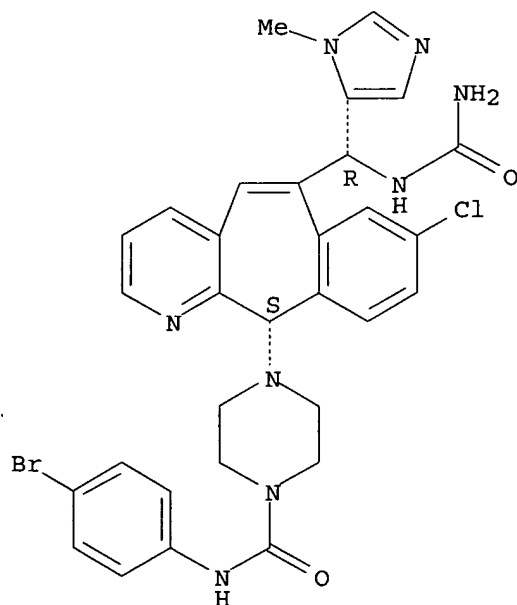
Absolute stereochemistry.



RN 740824-82-2 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-bromophenyl)- (9CI) (CA INDEX NAME)

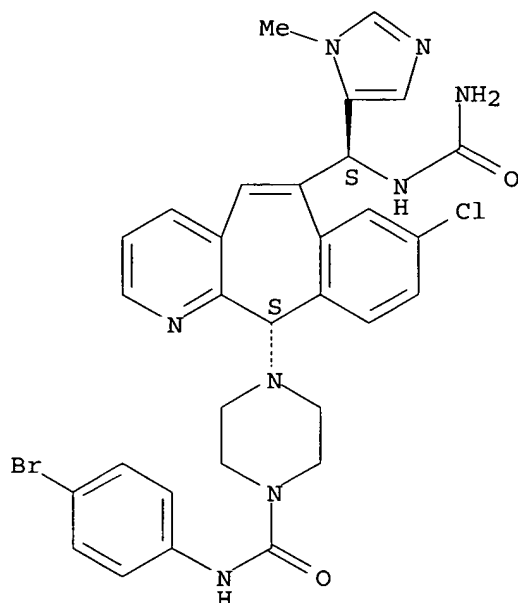
Absolute stereochemistry.



RN 740824-83-3 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-bromophenyl)- (9CI) (CA INDEX NAME)

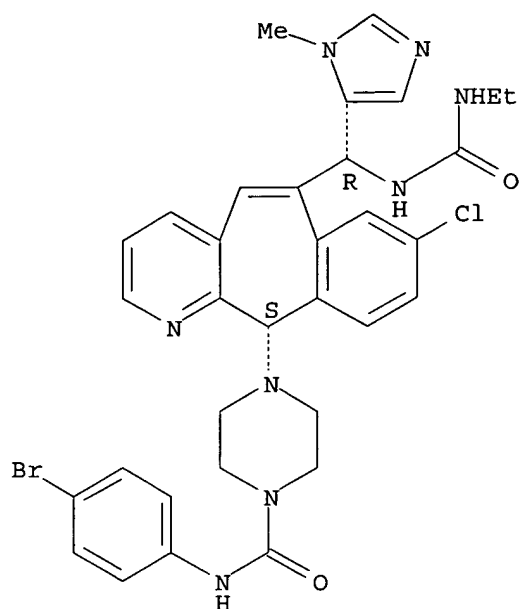
Absolute stereochemistry.



RN 740824-84-4 HCAPLUS

CN 1-Piperazinecarboxamide, N-(4-bromophenyl)-4-[(11S)-8-chloro-6-[(R)-[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]- (9CI) (CA INDEX NAME)

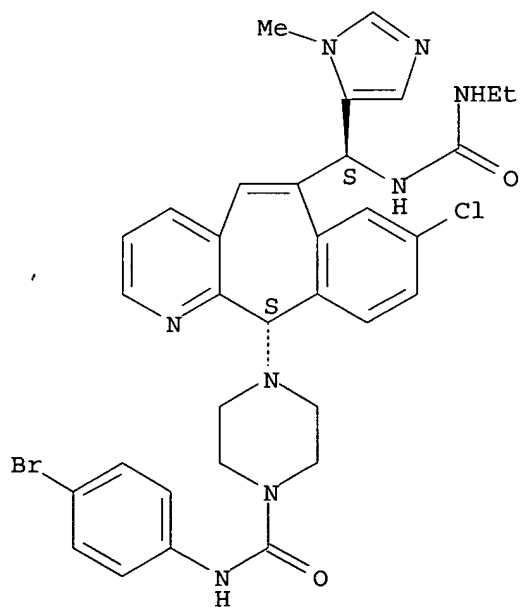
Absolute stereochemistry.



RN 740824-85-5 HCAPLUS

CN 1-Piperazinecarboxamide, N-(4-bromophenyl)-4-[(11S)-8-chloro-6-[(S)-[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

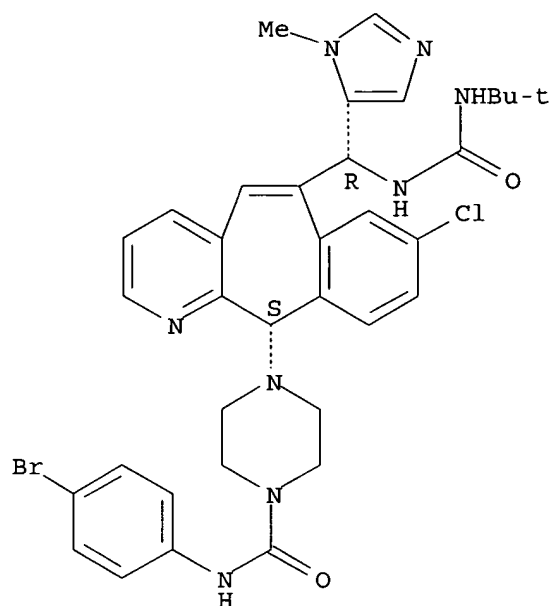


RN 740824-90-2 HCAPLUS

CN 1-Piperazinecarboxamide, N-(4-bromophenyl)-4-[(11S)-8-chloro-6-[(R)-[[[1,1-dimethylethyl]amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]- (9CI) (CA INDEX NAME)

NAME)

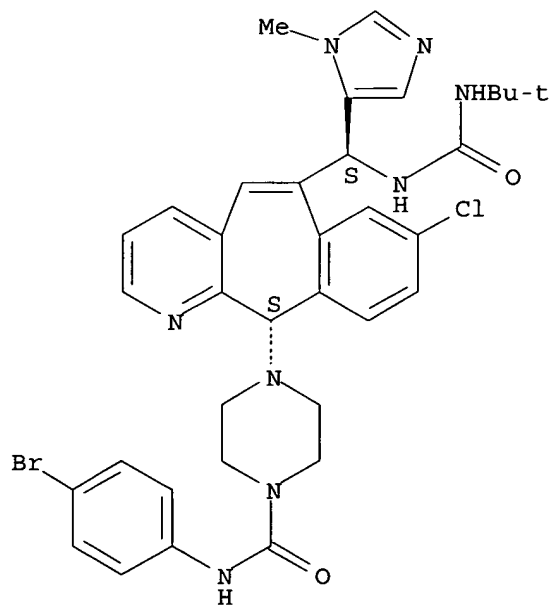
Absolute stereochemistry.



RN 740824-91-3 HCAPLUS

CN 1-Piperazinecarboxamide, N-(4-bromophenyl)-4-[(11S)-8-chloro-6-[(S)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]- (9CI) (CA INDEX NAME)

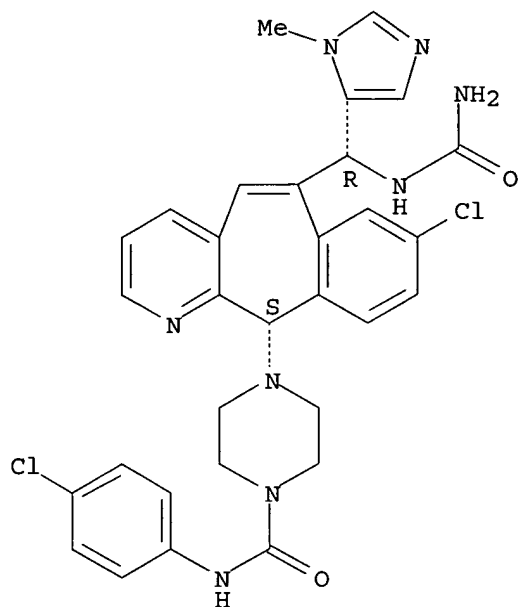
Absolute stereochemistry.



RN 740825-02-9 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-chlorophenyl)- (9CI) (CA INDEX NAME)

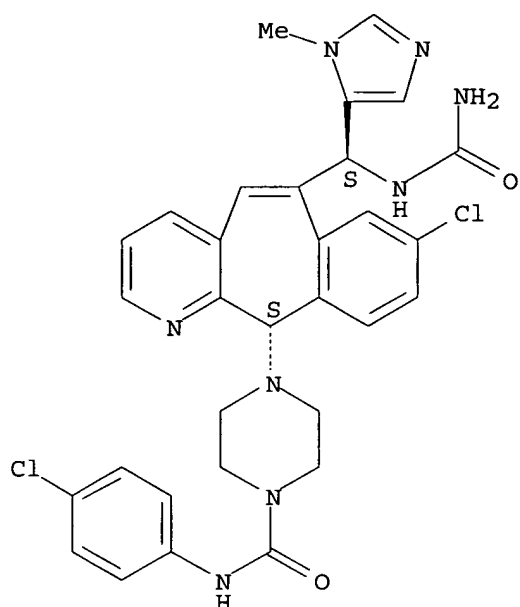
Absolute stereochemistry.



RN 740825-03-0 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-chlorophenyl)- (9CI) (CA INDEX NAME)

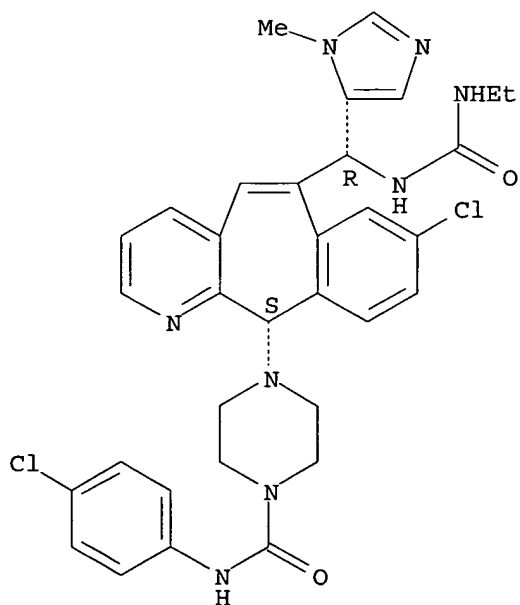
Absolute stereochemistry.



RN 740825-04-1 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-  
 [[(ethylamino)carbonyl]amino] (1-methyl-1H-imidazol-5-yl)methyl]-11H-  
 benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-chlorophenyl)- (9CI) (CA  
 INDEX NAME)

Absolute stereochemistry.

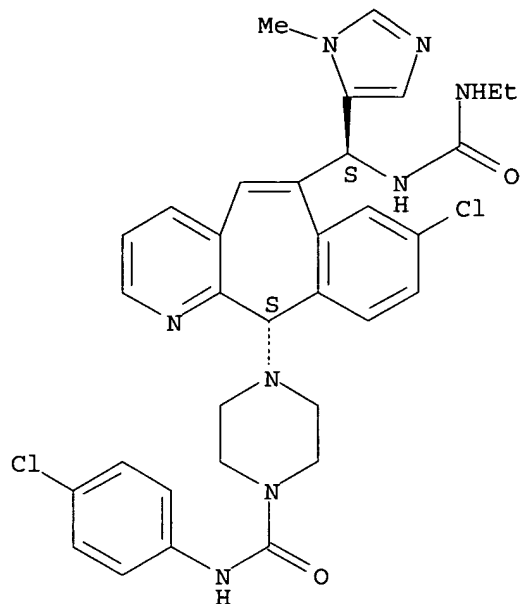


RN 740825-05-2 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-  
 [[(ethylamino)carbonyl]amino] (1-methyl-1H-imidazol-5-yl)methyl]-11H-

benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-chlorophenyl)- (9CI) (CA  
INDEX NAME)

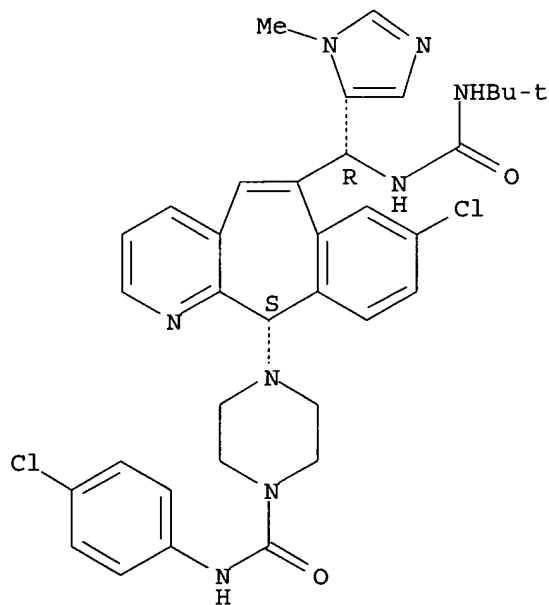
Absolute stereochemistry.



RN 740825-10-9 HCAPLUS

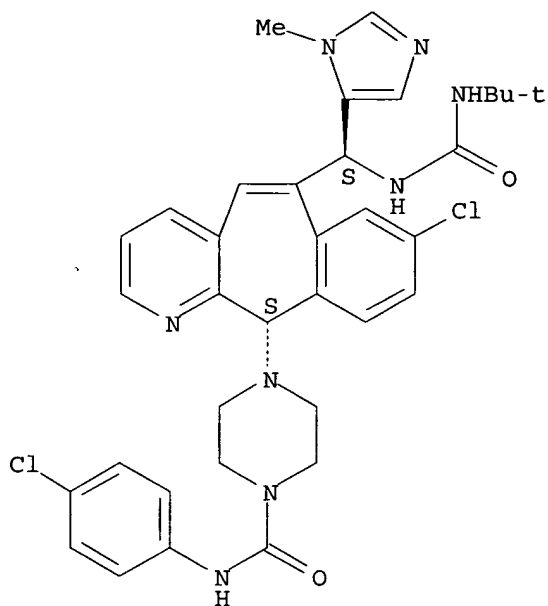
CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-chlorophenyl)- (9CI) (CA  
INDEX NAME)

Absolute stereochemistry.



RN 740825-11-0 HCAPLUS  
 CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-chlorophenyl)- (9CI) (CA INDEX NAME)

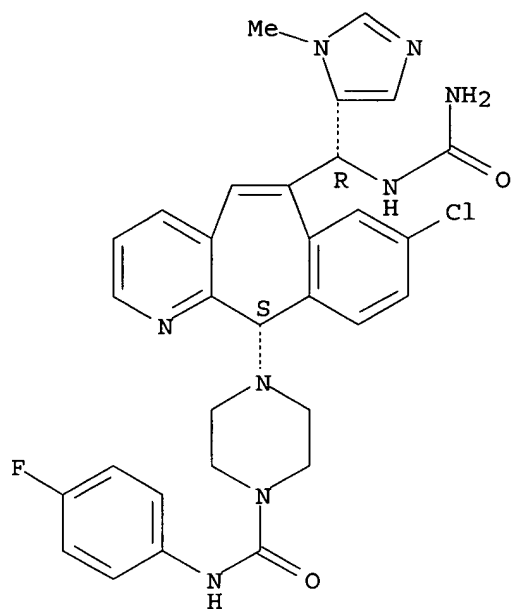
Absolute stereochemistry.



RN 740825-22-3 HCAPLUS  
 CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-fluorophenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

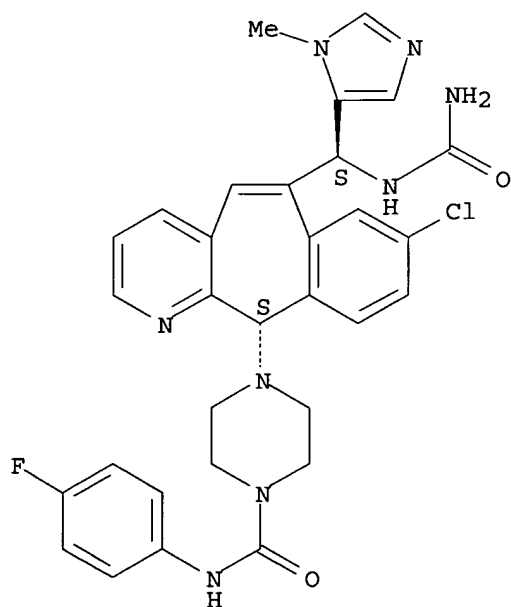




RN 740825-23-4 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-fluorophenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

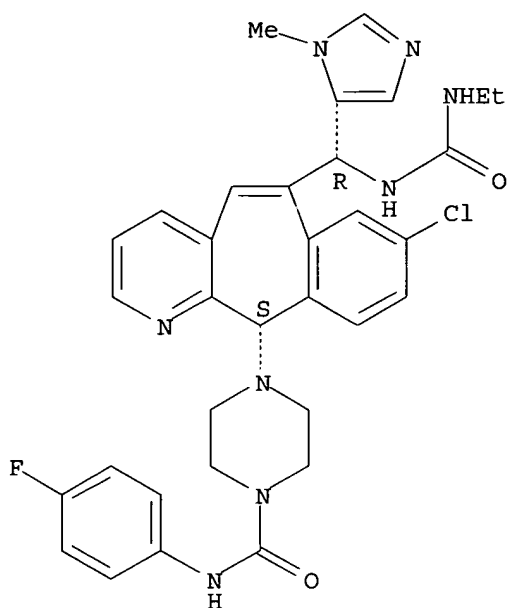


RN 740825-24-5 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-fluorophenyl)- (9CI) (CA

INDEX NAME)

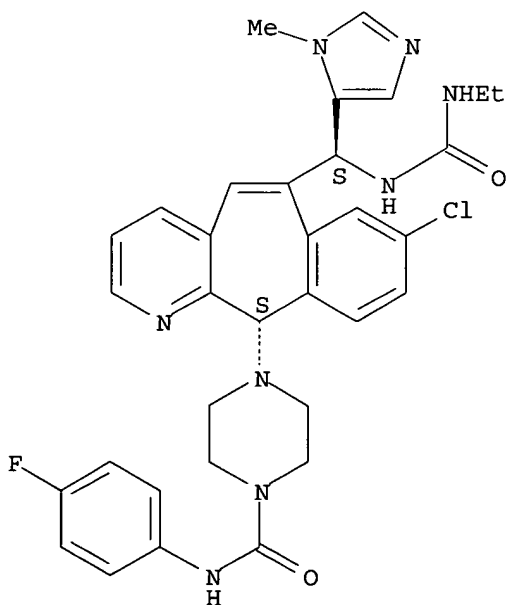
Absolute stereochemistry.



RN 740825-25-6 HCAPLUS

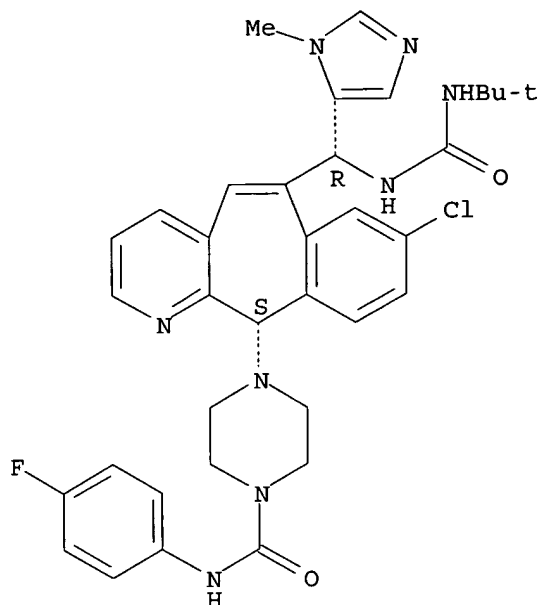
CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-  
 [[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-  
 benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-fluorophenyl)- (9CI) (CA  
 INDEX NAME)

Absolute stereochemistry.



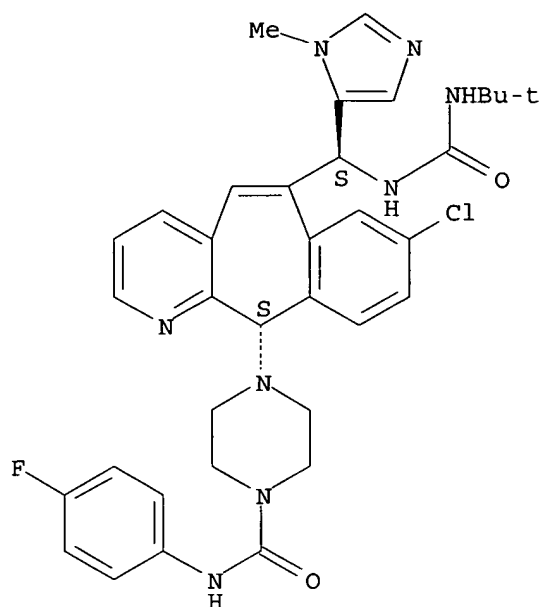
RN 740825-30-3 HCAPLUS  
 CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-fluorophenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 740825-31-4 HCAPLUS  
 CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-fluorophenyl)- (9CI) (CA INDEX NAME)

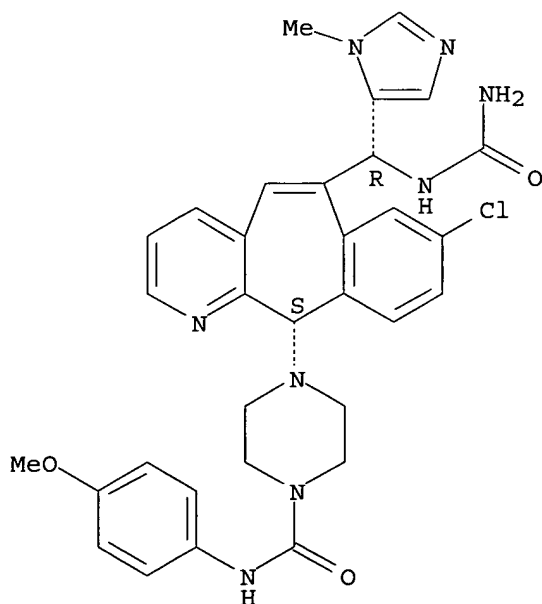
Absolute stereochemistry.



RN 740825-42-7 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

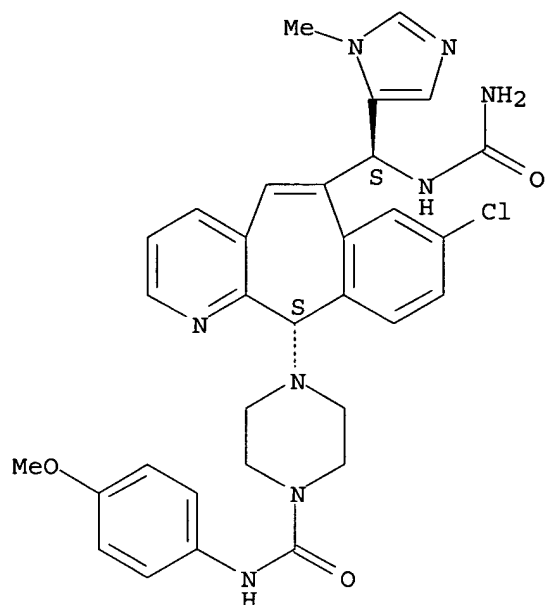
Absolute stereochemistry.



RN 740825-43-8 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

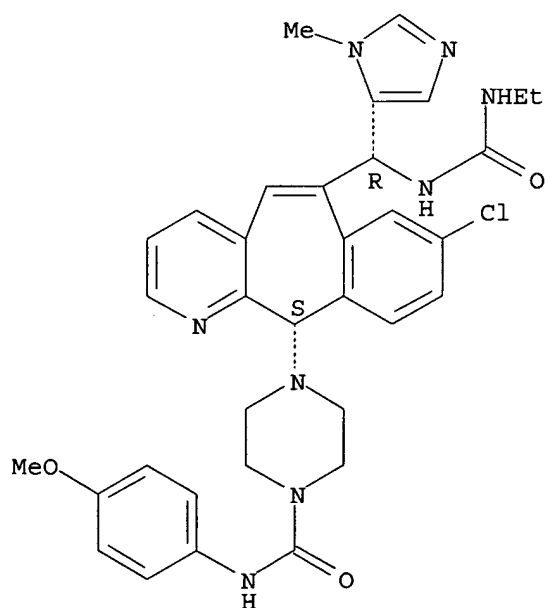
Absolute stereochemistry.



RN 740825-44-9 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-  
 [[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-  
 benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-methoxyphenyl)- (9CI) (CA  
 INDEX NAME)

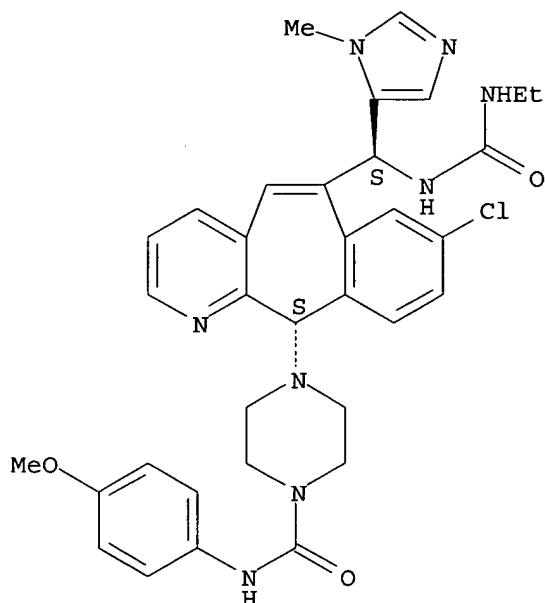
Absolute stereochemistry.



RN 740825-45-0 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-  
 [[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-  
 benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-methoxyphenyl)- (9CI) (CA  
 INDEX NAME)

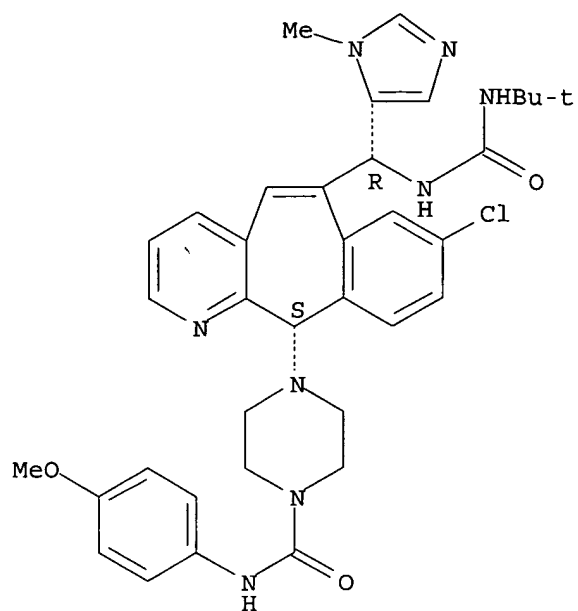
Absolute stereochemistry.



RN 740825-50-7 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-  
 dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-  
 benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-methoxyphenyl)- (9CI) (CA  
 INDEX NAME)

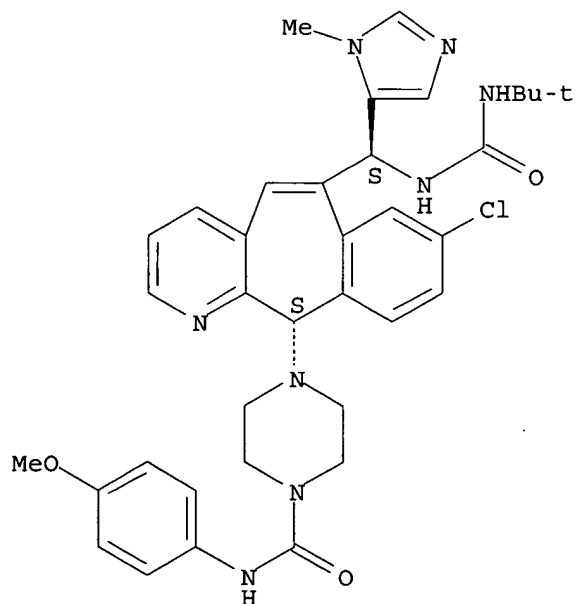
Absolute stereochemistry.



RN 740825-51-8 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

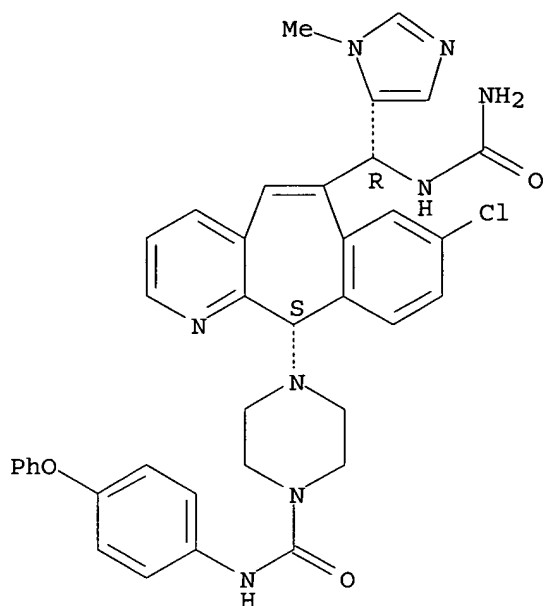


RN 740825-62-1 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-

11-yl]-N-(4-phenoxyphenyl)-(9CI) (CA INDEX NAME)

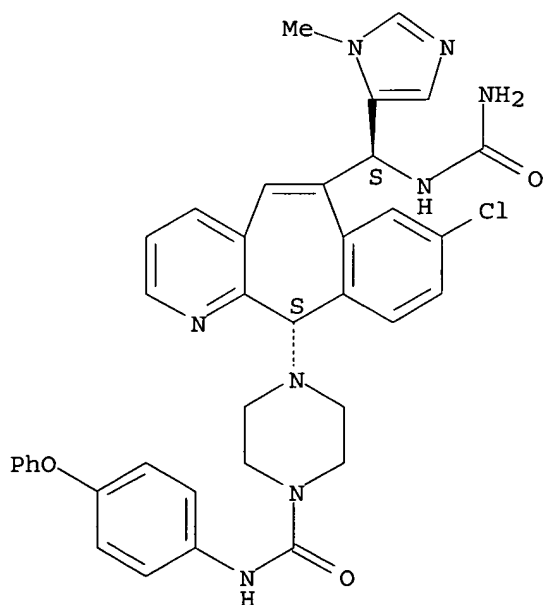
Absolute stereochemistry.



RN 740825-63-2 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-phenoxyphenyl)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

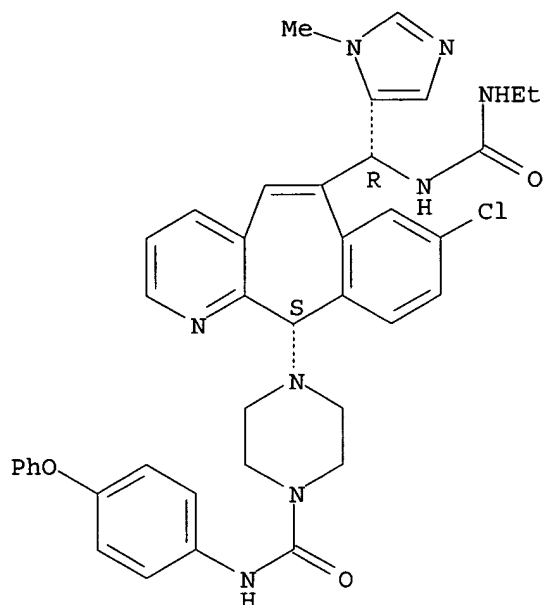


RN 740825-64-3 HCAPLUS



CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-  
 [[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-  
 benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-phenoxyphenyl)- (9CI) (CA  
 INDEX NAME)

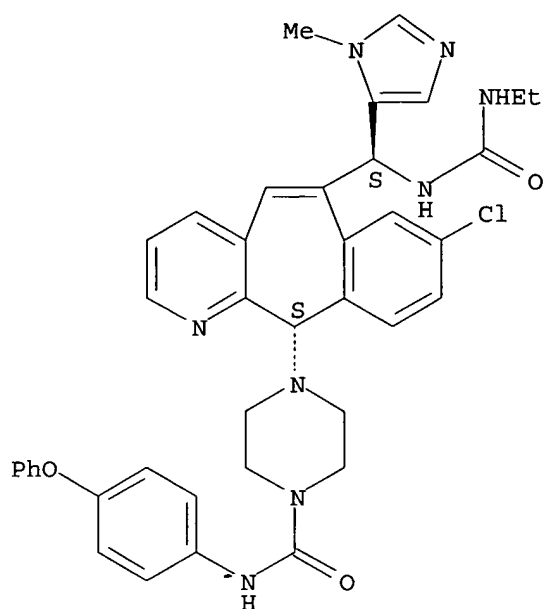
Absolute stereochemistry.



RN 740825-65-4 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-  
 [[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-  
 benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-phenoxyphenyl)- (9CI) (CA  
 INDEX NAME)

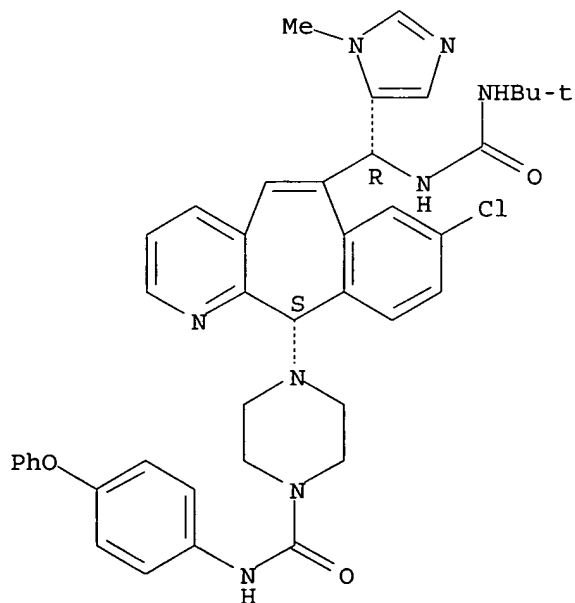
Absolute stereochemistry.



RN 740825-70-1 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-phenoxyphenyl)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

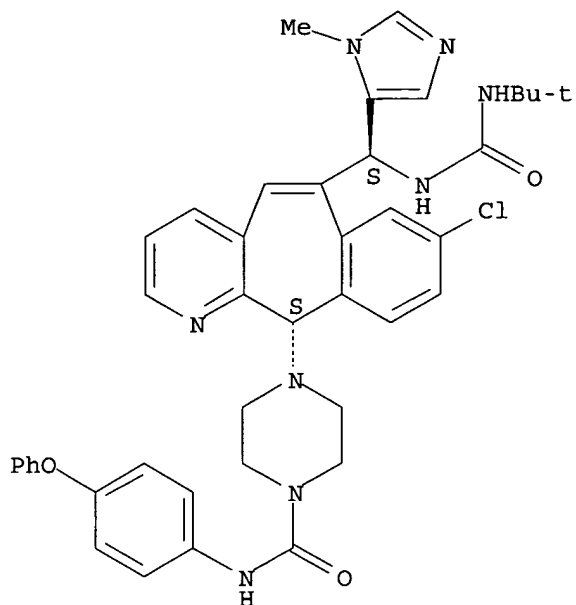


RN 740825-71-2 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-

benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-phenoxyphenyl)- (9CI) (CA INDEX NAME)

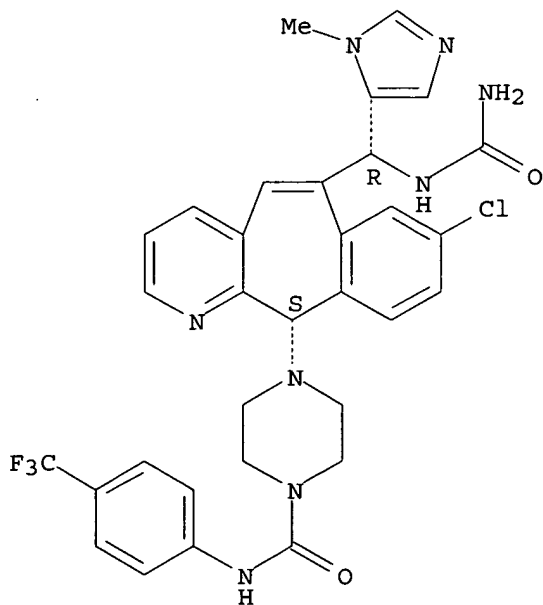
Absolute stereochemistry.



RN 740825-82-5 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

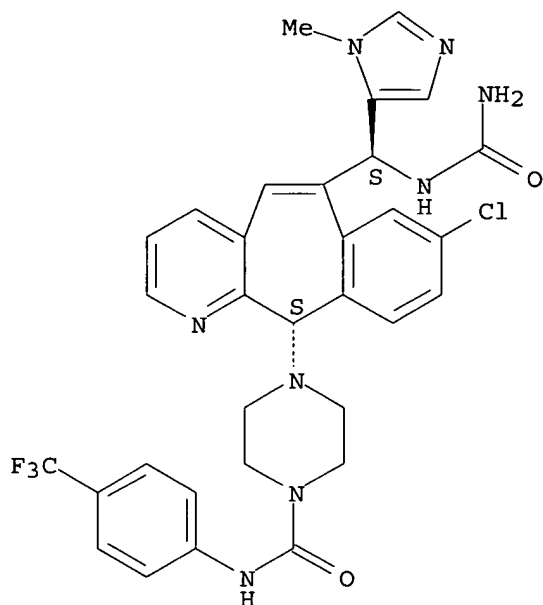
Absolute stereochemistry.



RN 740825-83-6 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

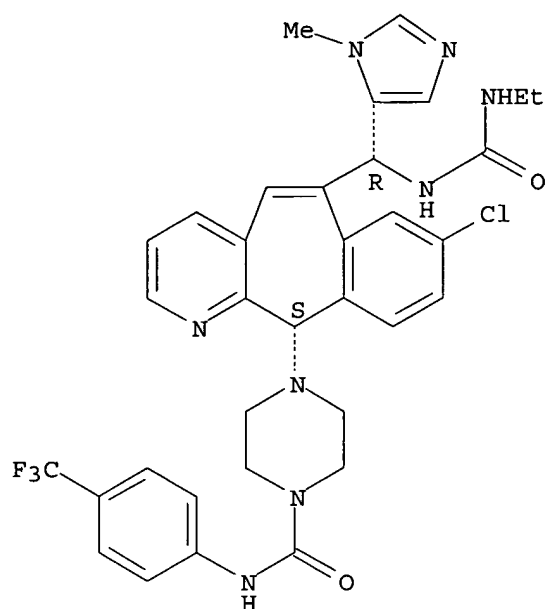
Absolute stereochemistry.



RN 740825-84-7 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

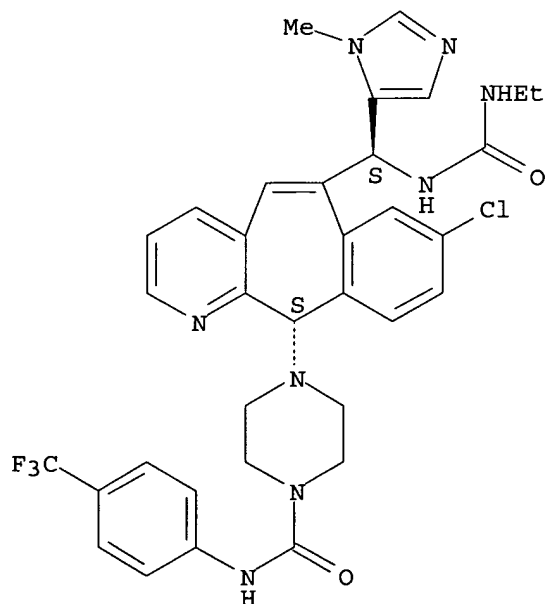
Absolute stereochemistry.



RN 740825-85-8 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-  
[[ (ethylamino) carbonyl] amino] (1-methyl-1H-imidazol-5-yl)methyl]-11H-  
benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[4-(trifluoromethyl)phenyl]-  
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

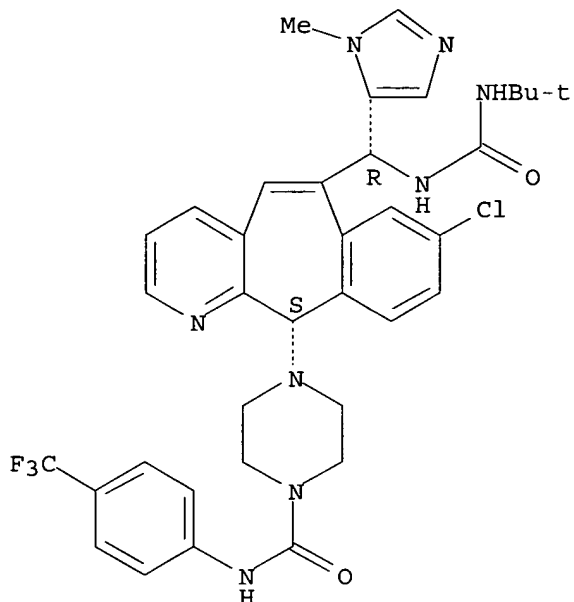


RN 740825-90-5 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-  
dimethylethyl) amino] carbonyl] amino] (1-methyl-1H-imidazol-5-yl)methyl]-11H-

benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[4-(trifluoromethyl)phenyl]-  
(9CI) (CA INDEX NAME)

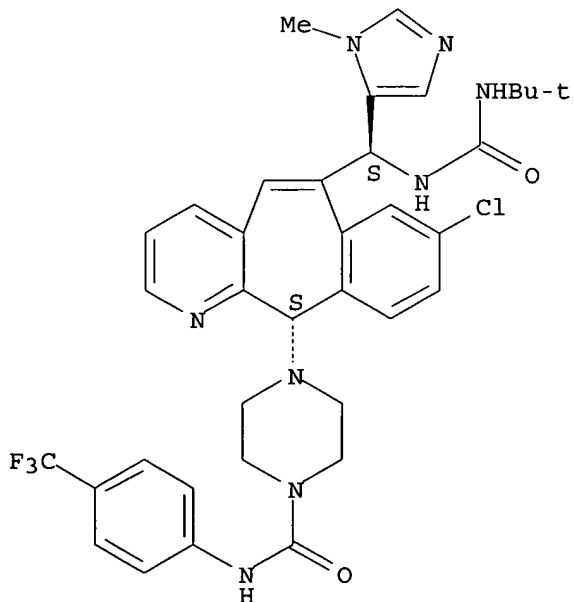
Absolute stereochemistry.



RN 740825-91-6 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[4-(trifluoromethyl)phenyl]-  
(9CI) (CA INDEX NAME)

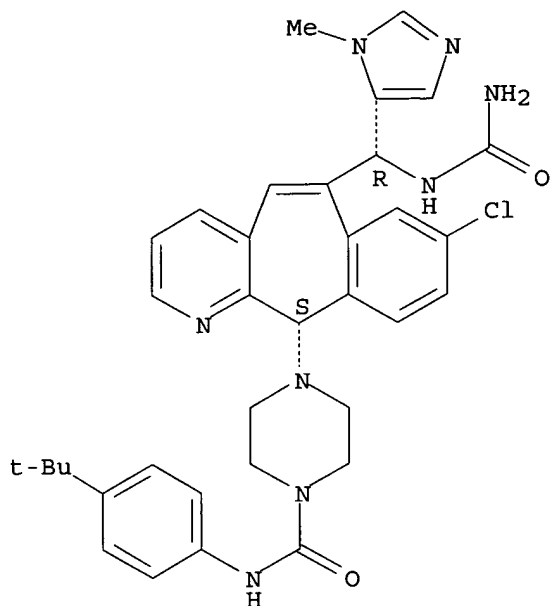
Absolute stereochemistry.



RN 740826-02-2 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[4-(1,1-dimethylethyl)phenyl]- (9CI) (CA INDEX NAME)

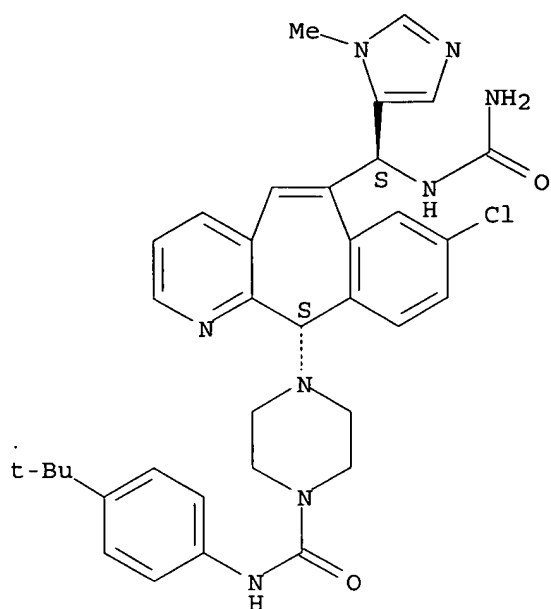
Absolute stereochemistry.



RN 740826-03-3 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[4-(1,1-dimethylethyl)phenyl]- (9CI) (CA INDEX NAME)

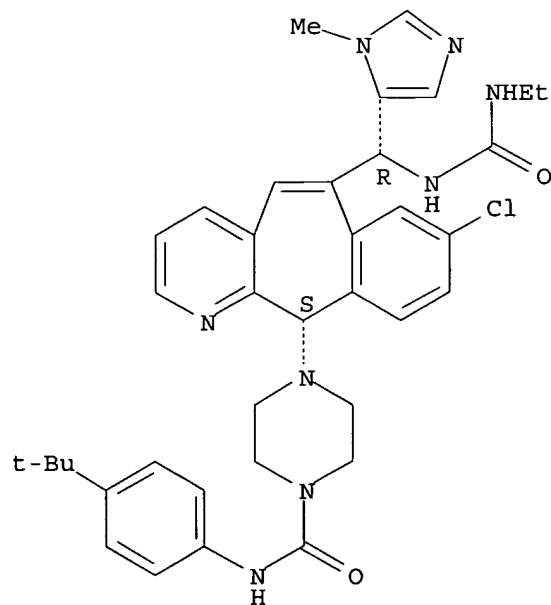
Absolute stereochemistry.



RN 740826-04-4 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-  
 [[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-  
 benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[4-(1,1-dimethylethyl)phenyl]-  
 (9CI) (CA INDEX NAME)

Absolute stereochemistry.



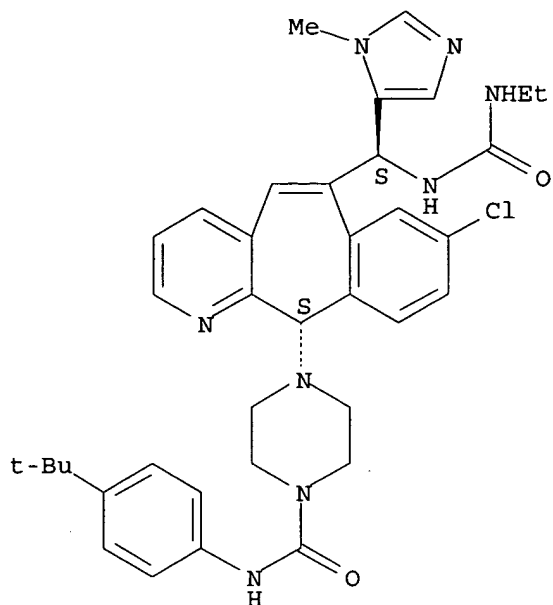
RN 740826-05-5 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-  
 [[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-



benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[4-(1,1-dimethylethyl)phenyl]-  
(9CI) (CA INDEX NAME)

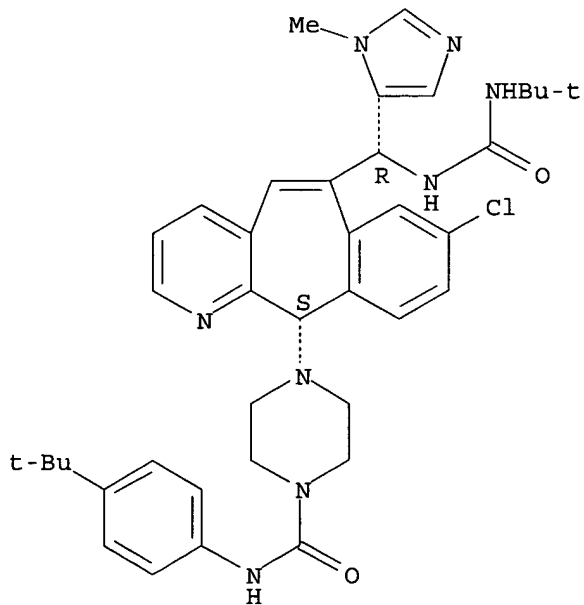
Absolute stereochemistry.



RN 740826-10-2 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[4-(1,1-dimethylethyl)phenyl]-  
(9CI) (CA INDEX NAME)

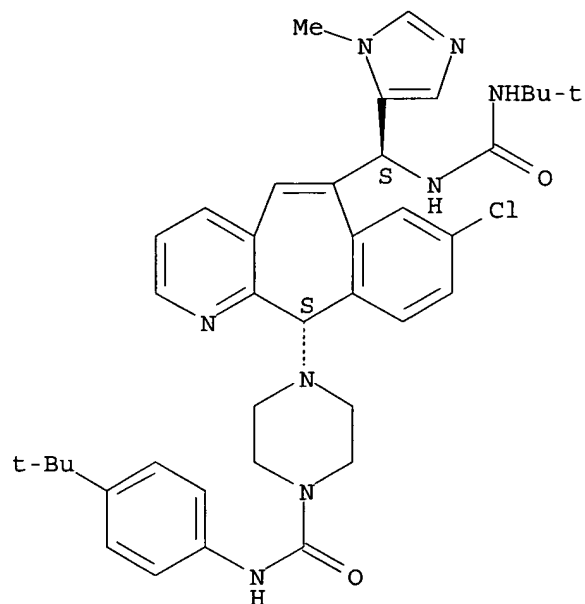
Absolute stereochemistry.



RN 740826-11-3 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[4-(1,1-dimethylethyl)phenyl]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

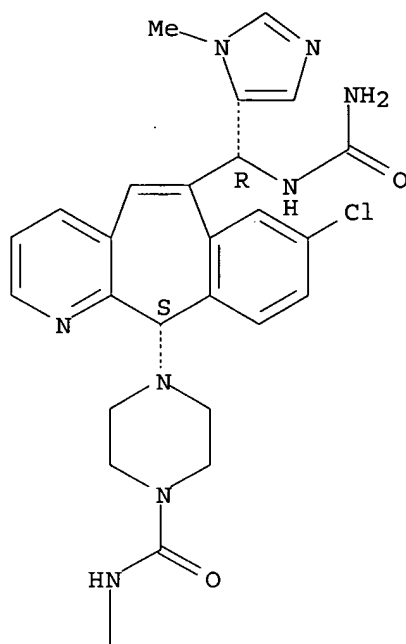


RN 740826-22-6 HCAPLUS

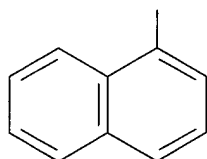
CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-1-naphthalenyl-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

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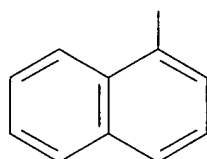
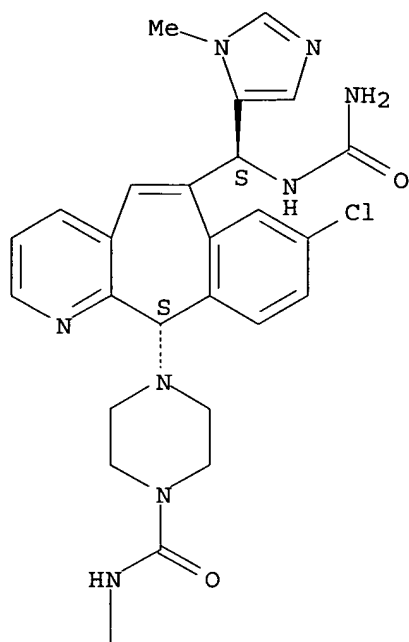
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RN 740826-23-7 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-1-naphthalenyl- (9CI) (CA INDEX NAME)

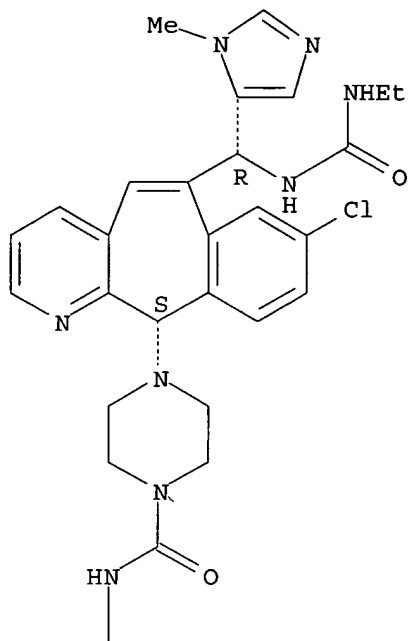
Absolute stereochemistry.



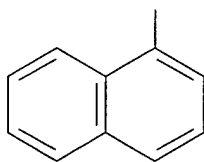
RN 740826-24-8 HCAPLUS  
 CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-  
 [[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-  
 benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-1-naphthalenyl- (9CI) (CA  
 INDEX NAME)

Absolute stereochemistry.

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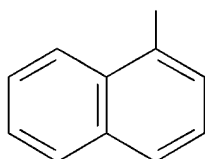
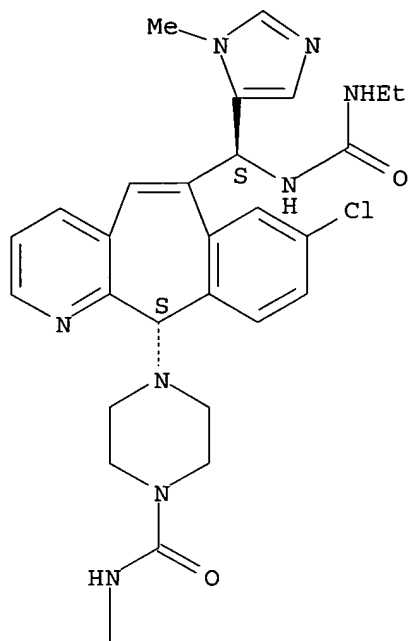


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RN 740826-25-9 HCAPLUS  
 CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-  
 [[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-  
 benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-1-naphthalenyl- (9CI) (CA  
 INDEX NAME)

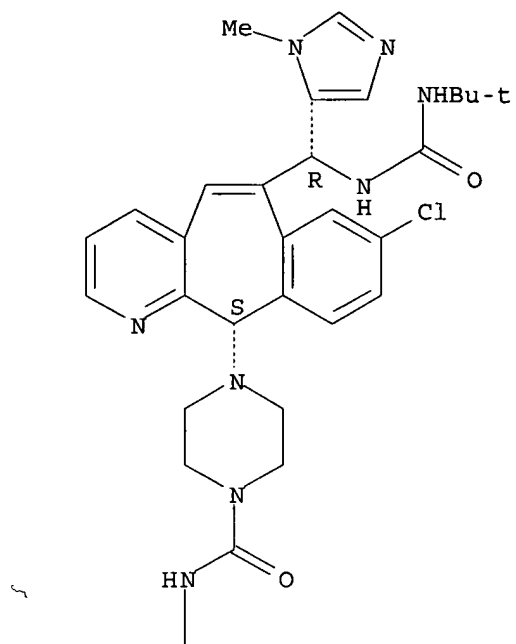
Absolute stereochemistry.



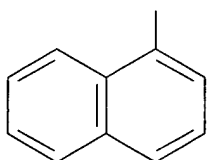
RN 740826-30-6 HCAPLUS  
 CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-1-naphthalenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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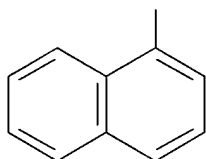
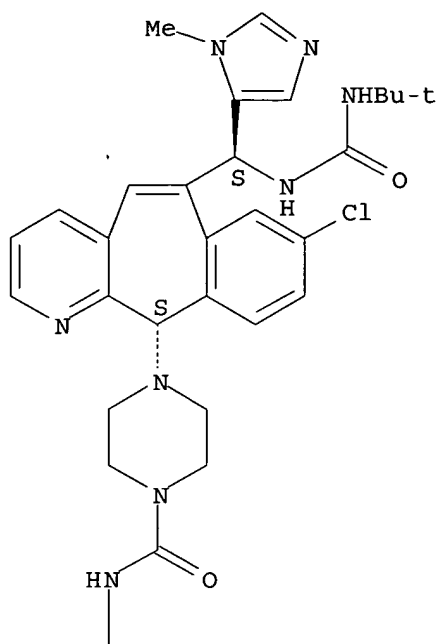


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RN 740826-31-7 HCAPLUS  
 CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-1-naphthalenyl- (9CI) (CA INDEX NAME)

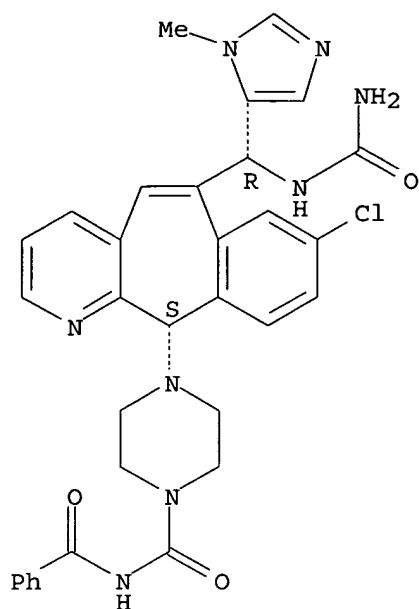
Absolute stereochemistry.



RN 740826-42-0 HCAPLUS  
 CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-benzoyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

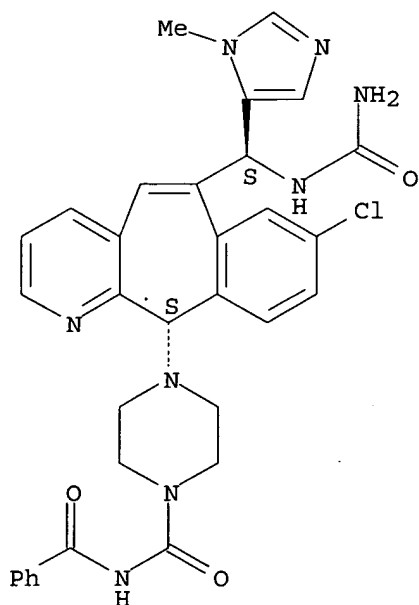




RN 740826-43-1 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-benzoyl- (9CI) (CA INDEX NAME)

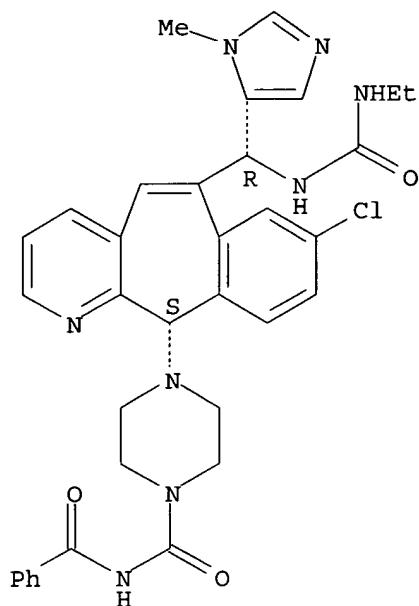
Absolute stereochemistry.



RN 740826-44-2 HCAPLUS

CN 1-Piperazinecarboxamide, N-benzoyl-4-[(11S)-8-chloro-6-[(R)-[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]- (9CI) (CA INDEX NAME)

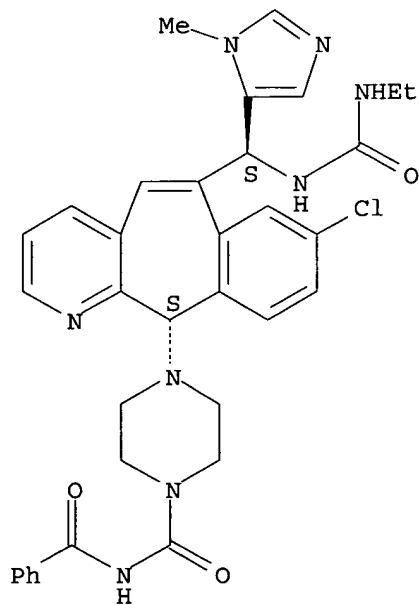
Absolute stereochemistry.



RN 740826-45-3 HCAPLUS

CN 1-Piperazinecarboxamide, N-benzoyl-4-[(11S)-8-chloro-6-[(S)-  
 [[(ethylamino)carbonylamino](1-methyl-1H-imidazol-5-yl)methyl]-11H-  
 benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



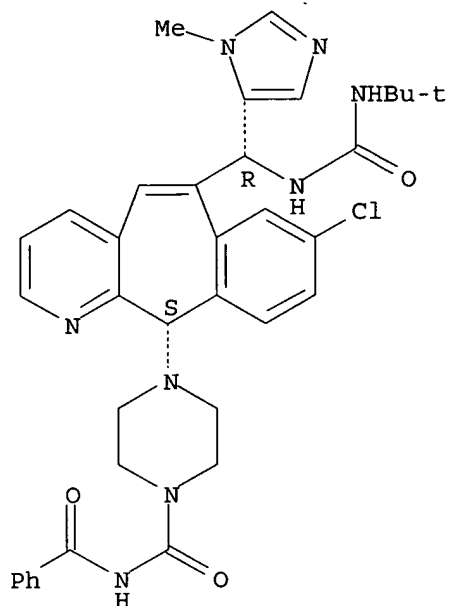
RN 740826-50-0 HCAPLUS

CN 1-Piperazinecarboxamide, N-benzoyl-4-[(11S)-8-chloro-6-[(R)-[[[(1,1-

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dimethylethyl)amino]carbonyl]amino] (1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]- (9CI) (CA INDEX NAME)

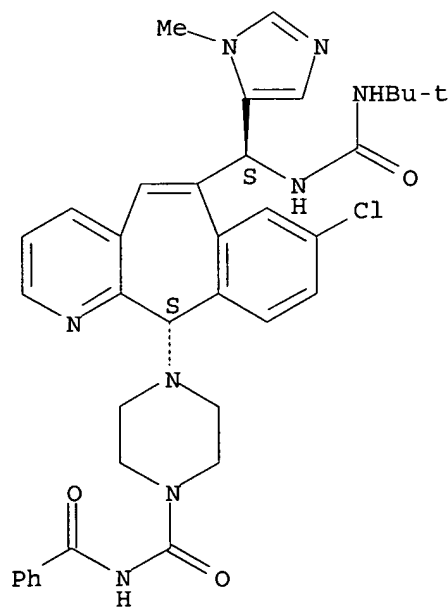
Absolute stereochemistry.



RN 740826-51-1 HCAPLUS

CN 1-Piperazinecarboxamide, N-benzoyl-4-[(11S)-8-chloro-6-[(S)-[[[(1,1-dimethylethyl)amino]carbonyl]amino] (1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]- (9CI) (CA INDEX NAME)

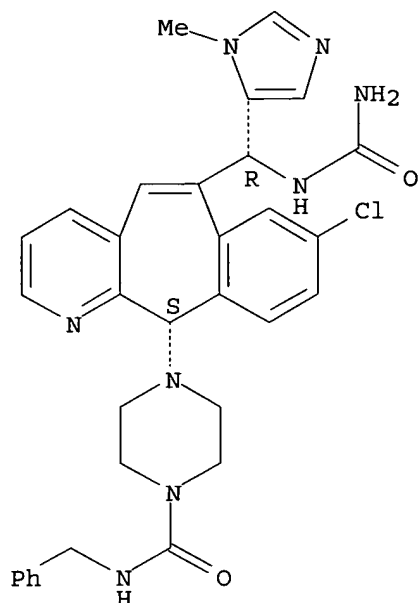
Absolute stereochemistry.



RN 740826-62-4 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(phenylmethyl)- (9CI) (CA INDEX NAME)

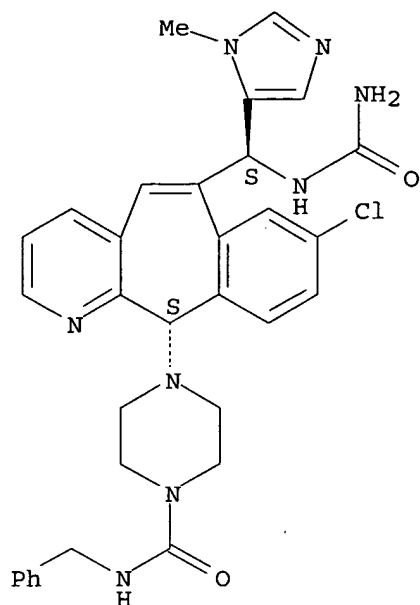
Absolute stereochemistry.



RN 740826-63-5 HCAPLUS

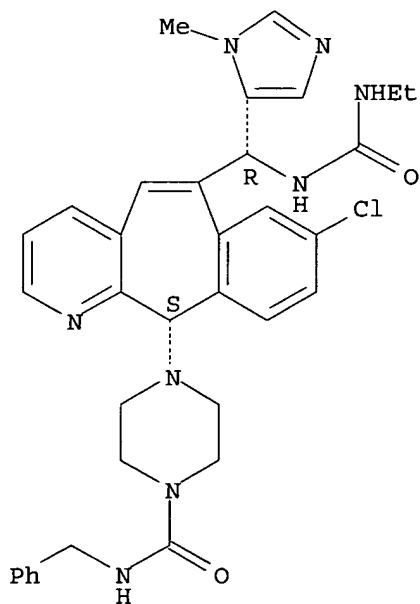
CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 740826-64-6 HCAPLUS  
 CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-  
 [(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-  
 benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(phenylmethyl)- (9CI) (CA  
 INDEX NAME)

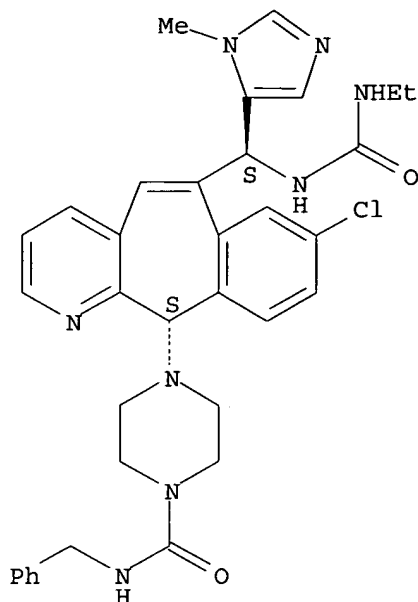
Absolute stereochemistry.



RN 740826-65-7 HCAPLUS  
 CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-  
 [(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-

benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(phenylmethyl)- (9CI) (CA  
INDEX NAME)

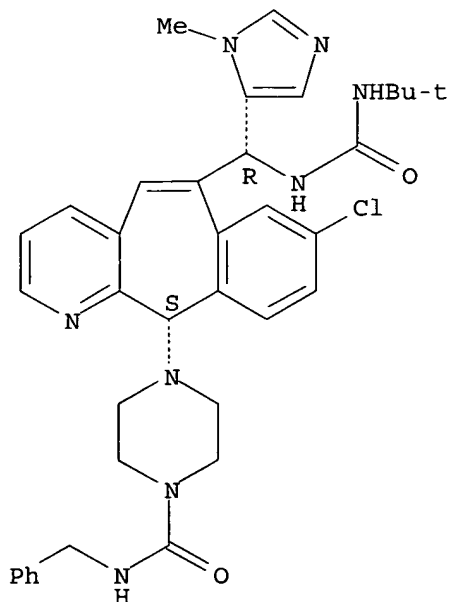
Absolute stereochemistry.



RN 740826-70-4 HCAPLUS

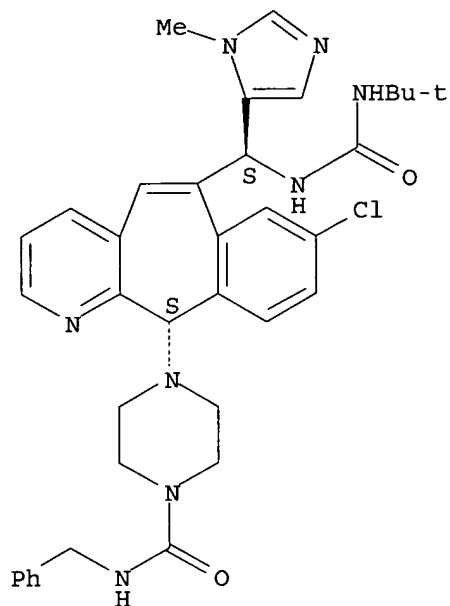
CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(phenylmethyl)- (9CI) (CA  
INDEX NAME)

Absolute stereochemistry.



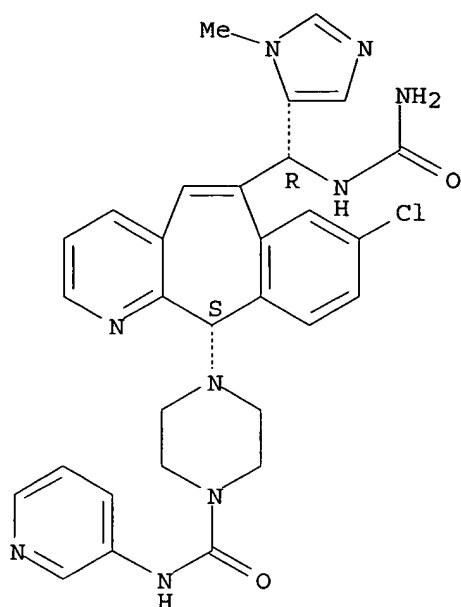
RN 740826-71-5 HCAPLUS  
 CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 740826-82-8 HCAPLUS  
 CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-3-pyridinyl- (9CI) (CA INDEX NAME)

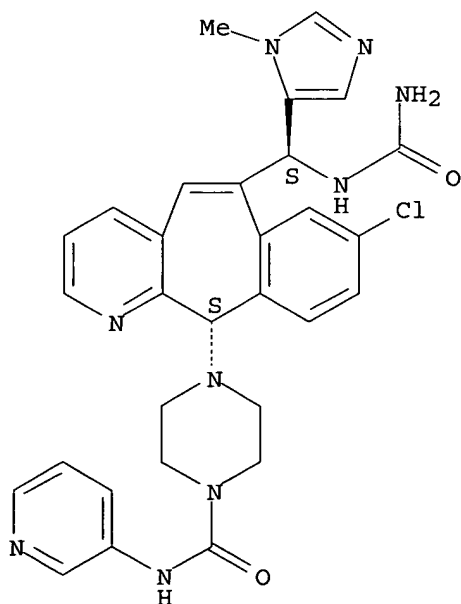
Absolute stereochemistry.



RN 740826-83-9 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-3-pyridinyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



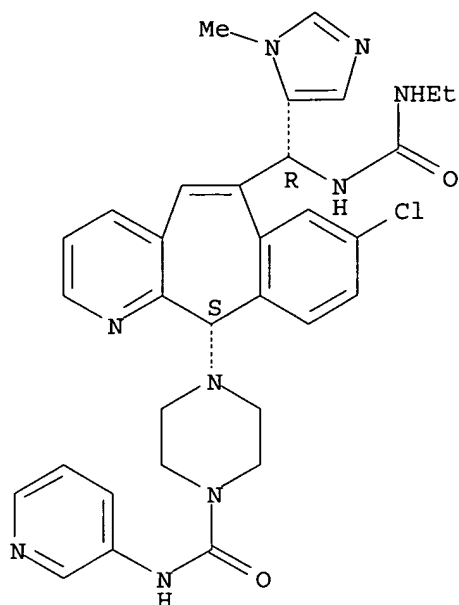
RN 740826-84-0 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-3-pyridinyl- (9CI) (CA INDEX NAME)



NAME)

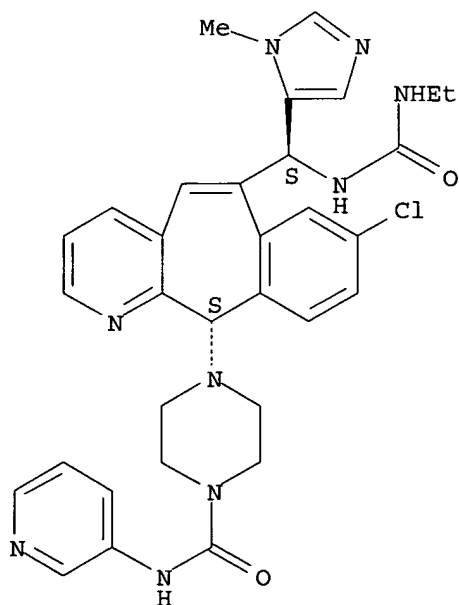
Absolute stereochemistry.



RN 740826-85-1 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-  
 [[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-  
 benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-3-pyridinyl- (9CI) (CA INDEX  
 NAME)

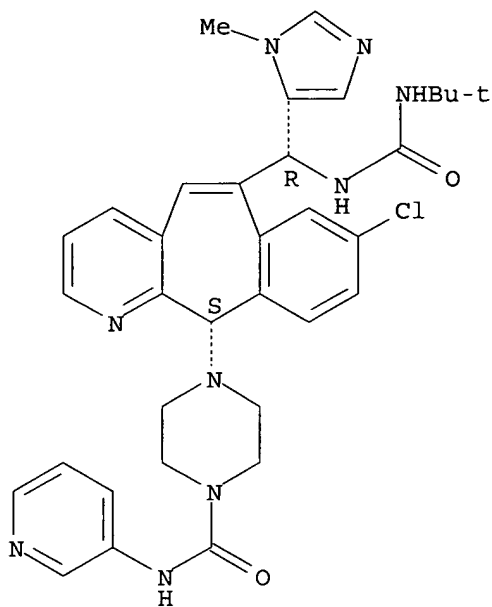
Absolute stereochemistry.



RN 740826-90-8 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-3-pyridinyl- (9CI) (CA INDEX NAME)

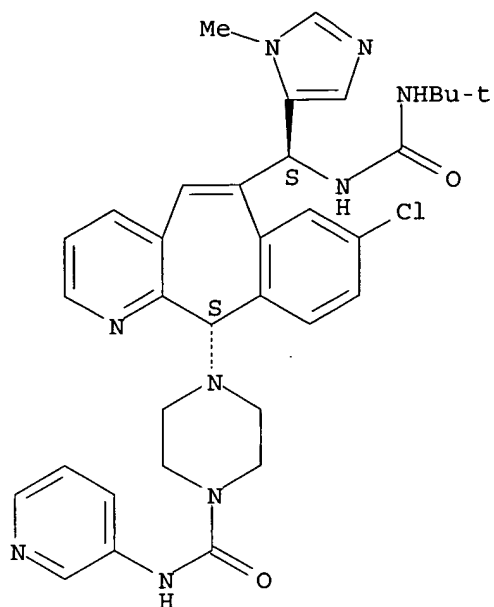
Absolute stereochemistry.



RN 740826-91-9 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-3-pyridinyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

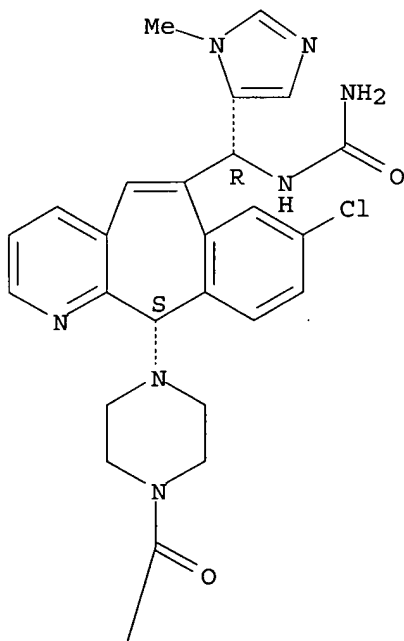


RN 740827-02-5 HCAPLUS

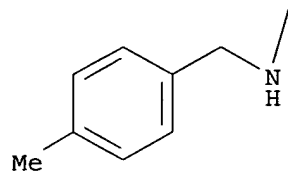
CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[(4-methylphenyl)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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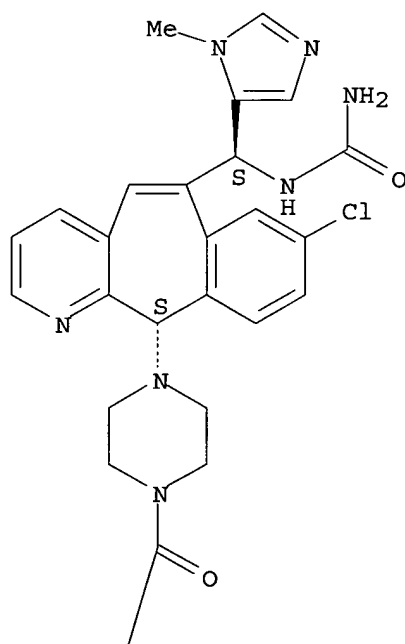
PAGE 2-A



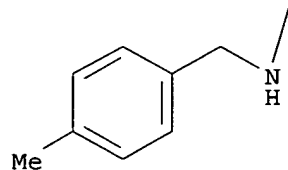
RN 740827-03-6 HCAPLUS  
 CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[(4-methylphenyl)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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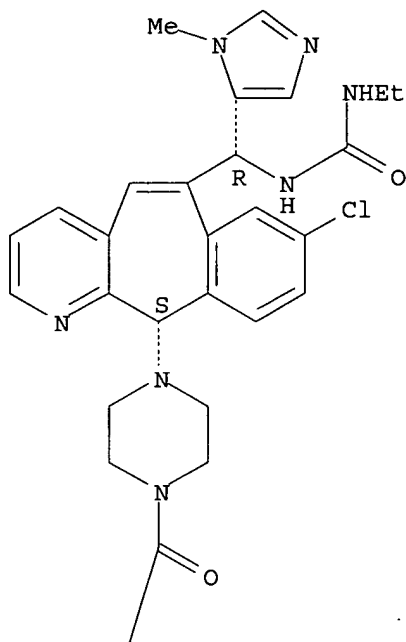
RN 740827-04-7 HCAPLUS  
 CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[(ethanamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-

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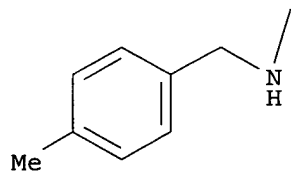
benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[(4-methylphenyl)methyl]-  
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

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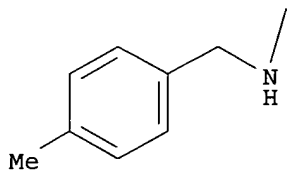
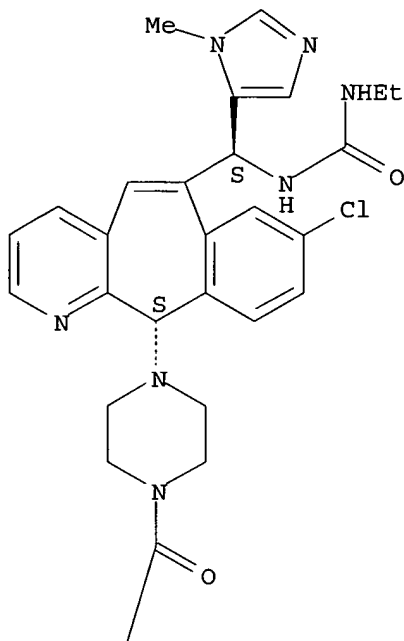


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RN 740827-05-8 HCAPLUS  
CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-  
[[ (ethylamino) carbonyl] amino] (1-methyl-1H-imidazol-5-yl)methyl]-11H-  
benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[(4-methylphenyl)methyl]-  
(9CI) (CA INDEX NAME)

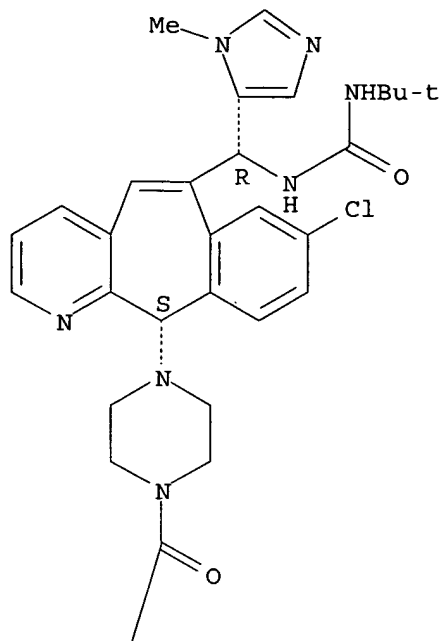
Absolute stereochemistry.



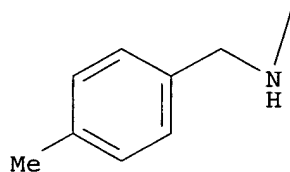
RN 740827-10-5 HCAPLUS  
 CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[(4-methylphenyl)methyl]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

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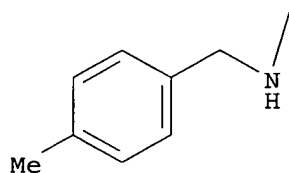
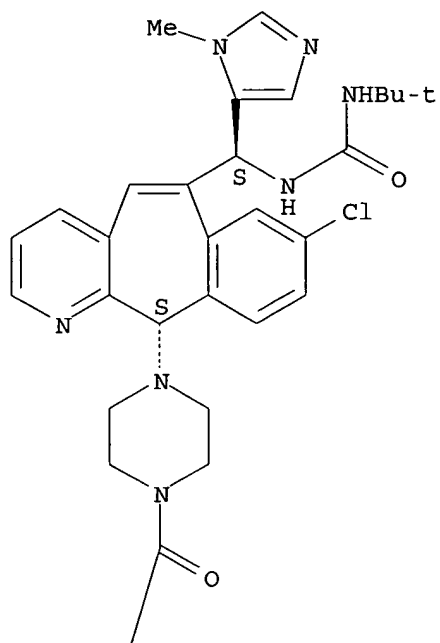


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RN 740827-11-6 HCAPLUS  
 CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[(4-methylphenyl)methyl]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

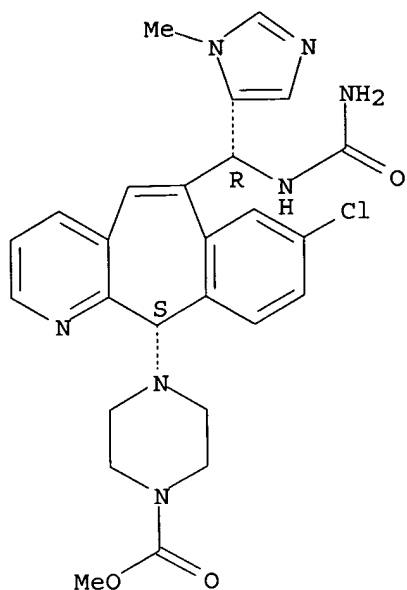


RN 740831-71-4 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

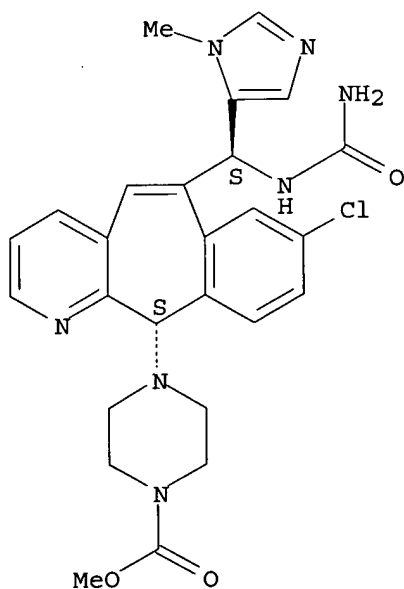




RN 740831-73-6 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, methyl ester (9CI) (CA INDEX NAME)

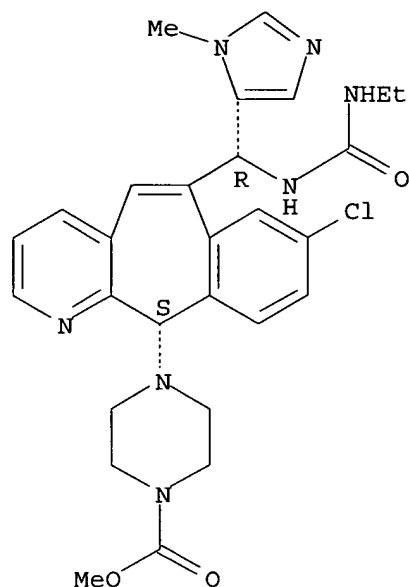
Absolute stereochemistry.



RN 740831-75-8 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(R)-[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, methyl ester (9CI) (CA INDEX NAME)

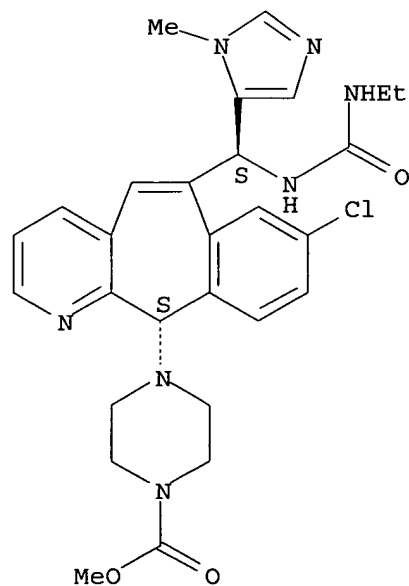
Absolute stereochemistry.



RN 740831-77-0 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(S)-  
 [[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-  
 benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, methyl ester (9CI) (CA INDEX  
 NAME)

Absolute stereochemistry.

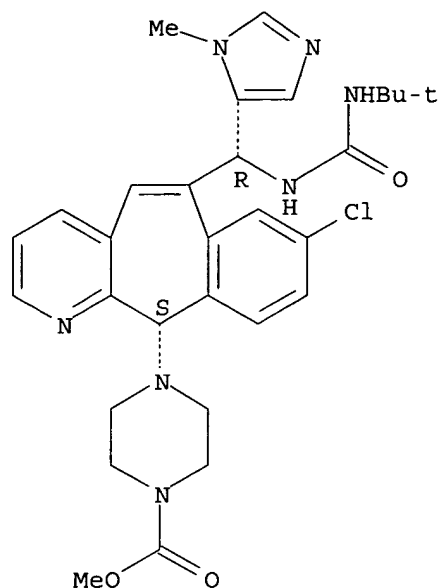


RN 740831-87-2 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-  
 dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-  
 benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, methyl ester (9CI) (CA INDEX

NAME)

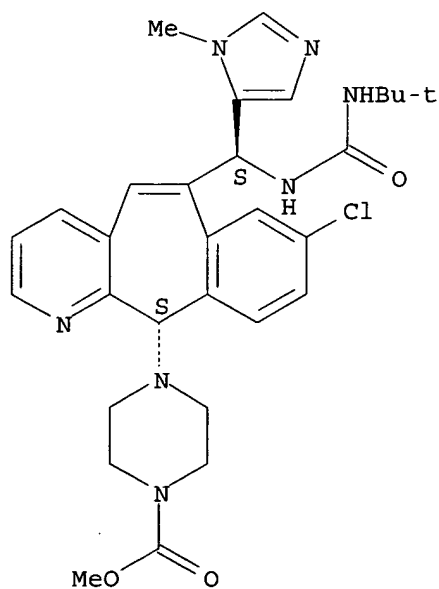
Absolute stereochemistry.



RN 740831-89-4 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(S)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



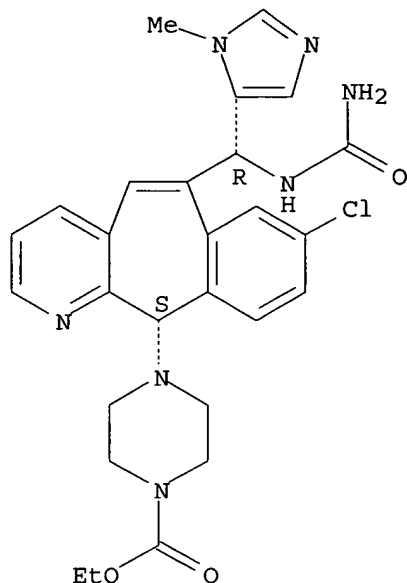
RN 740832-11-5 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, methyl ester (9CI) (CA INDEX NAME)

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methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, ethyl ester (9CI) (CA INDEX NAME)

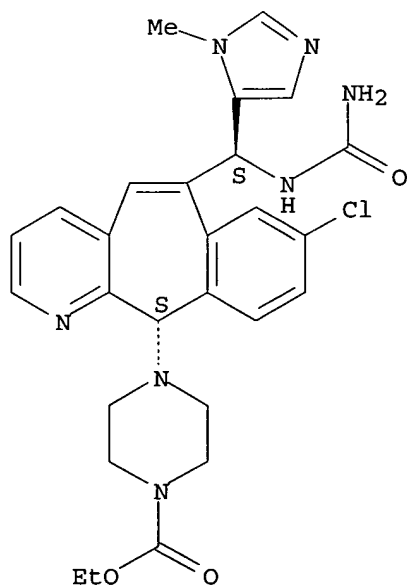
Absolute stereochemistry.



RN 740832-13-7 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

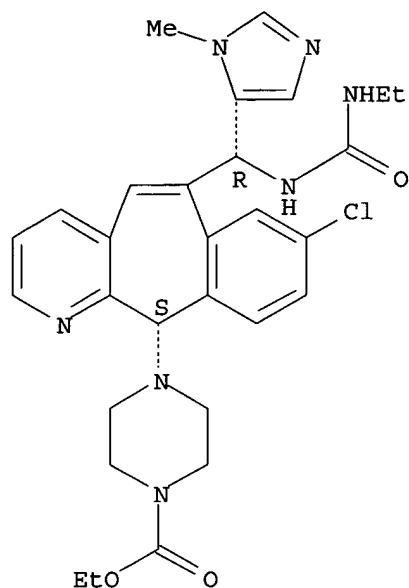


RN 740832-15-9 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, ethyl ester (9CI) (CA INDEX NAME)

[[ (ethylamino) carbonyl] amino] (1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, ethyl ester (9CI) (CA INDEX NAME)

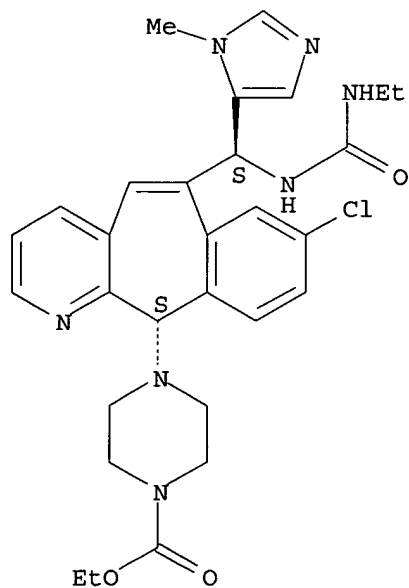
Absolute stereochemistry.



RN 740832-17-1 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(S)-[[ (ethylamino) carbonyl] amino] (1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, ethyl ester (9CI) (CA INDEX NAME)

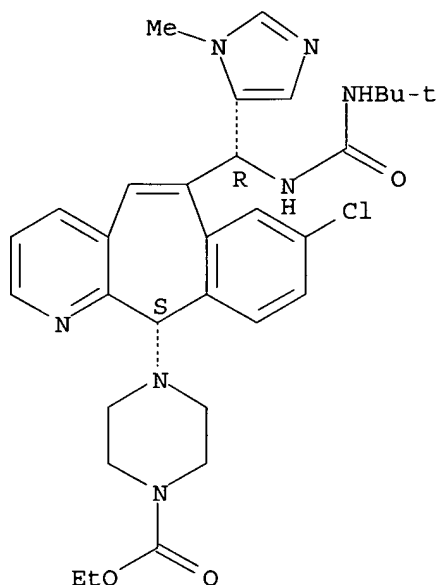
Absolute stereochemistry.



RN 740832-27-3 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, ethyl ester (9CI) (CA INDEX NAME)

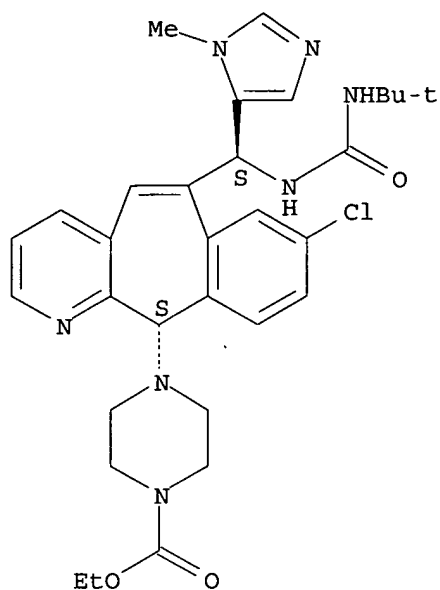
Absolute stereochemistry.



RN 740832-29-5 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(S)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, ethyl ester (9CI) (CA INDEX NAME)

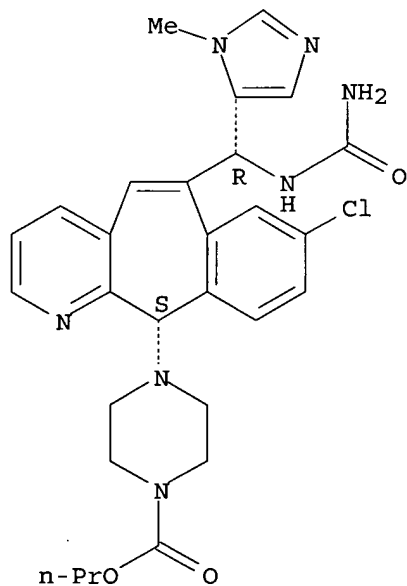
Absolute stereochemistry.



RN 740832-51-3 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, propyl ester (9CI) (CA INDEX NAME)

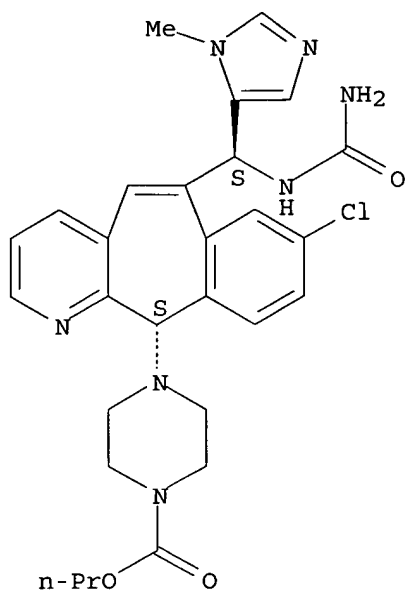
Absolute stereochemistry.



RN 740832-53-5 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, propyl ester (9CI) (CA INDEX NAME)

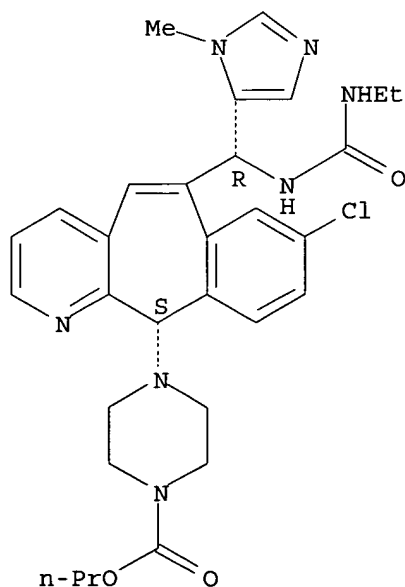
Absolute stereochemistry.



RN 740832-55-7 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(R)-  
 [[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-  
 benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, propyl ester (9CI) (CA INDEX  
 NAME)

Absolute stereochemistry.

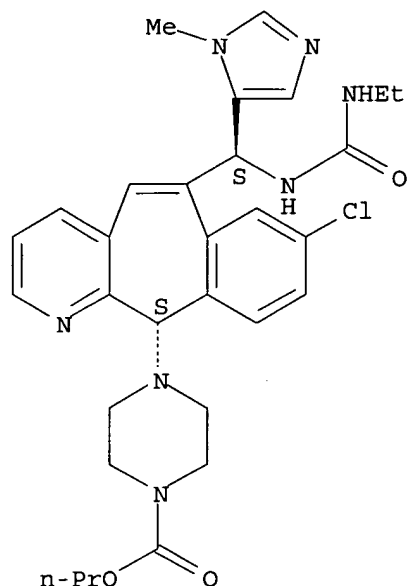


RN 740832-57-9 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(S)-  
 [[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-  
 benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, propyl ester (9CI) (CA INDEX  
 NAME)



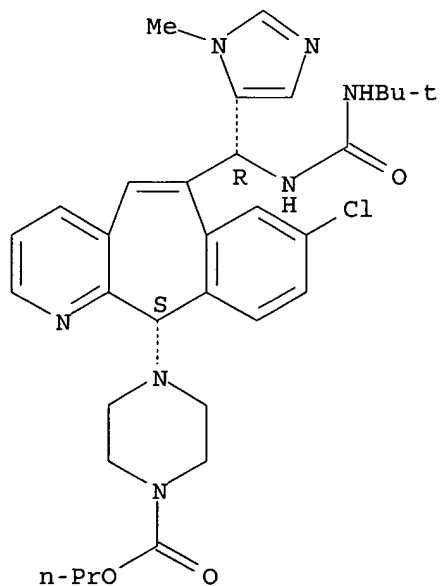
Absolute stereochemistry.



RN 740832-67-1 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, propyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



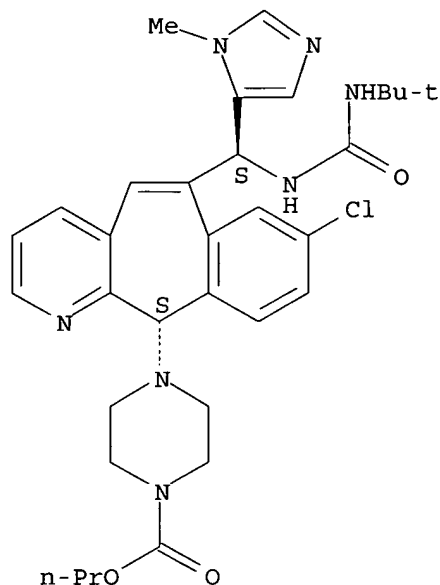
RN 740832-69-3 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(S)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-

Pryor 10\_637163

benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, propyl ester (9CI) (CA INDEX NAME)

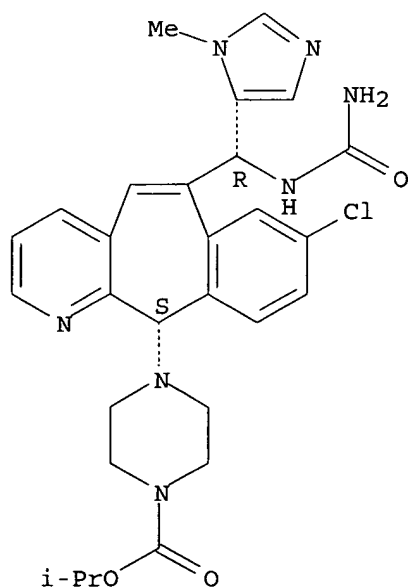
Absolute stereochemistry.



RN 740832-85-3 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1-methylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



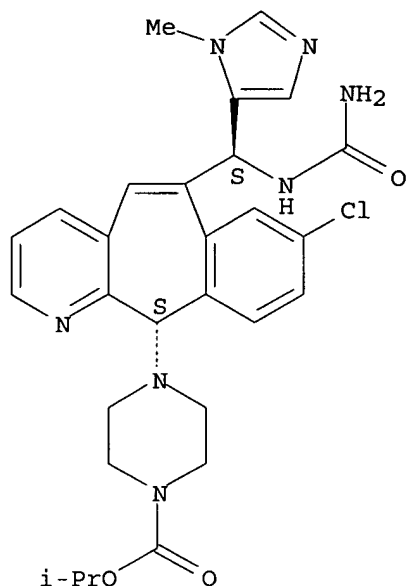
RN 740832-87-5 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1-methylethyl ester (9CI) (CA INDEX NAME)

Pryor 10\_637163

methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1-methylethyl ester (9CI) (CA INDEX NAME)

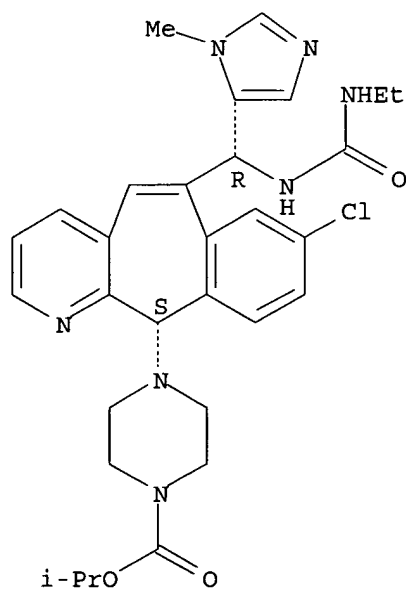
Absolute stereochemistry.



RN 740832-90-0 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(R)-[[[(ethylamino) carbonyl] amino] (1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1-methylethyl ester (9CI) (CA INDEX NAME)

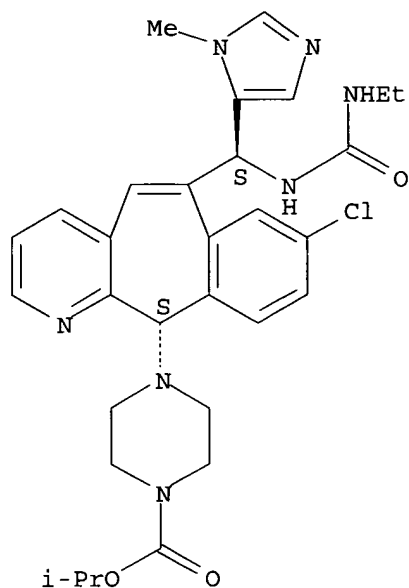
Absolute stereochemistry.



RN 740832-93-3 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(S)-  
 [[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-  
 benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1-methylethyl ester (9CI) (CA  
 INDEX NAME)

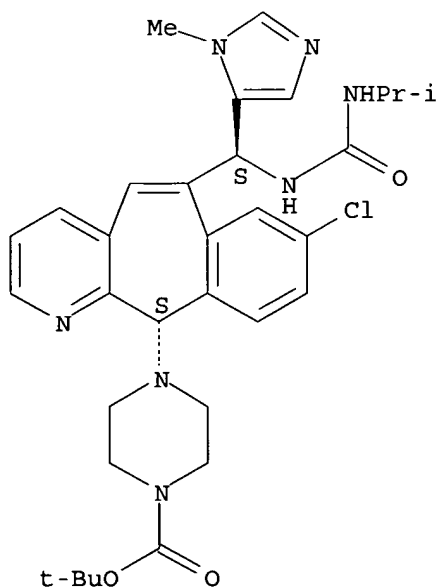
Absolute stereochemistry.



RN 740833-34-5 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(S)-[[[(1-  
 methylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-  
 benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1,1-dimethylethyl ester (9CI)  
 (CA INDEX NAME)

Absolute stereochemistry.



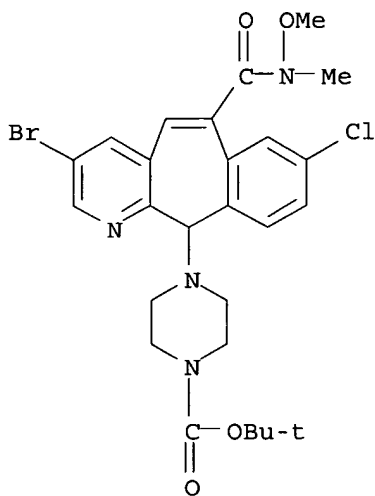
IT 592554-89-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of tricyclic antitumor agents as farnesyl protein transferase inhibitors for treatment of cancer and other proliferative diseases)

RN 592554-89-7 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[3-bromo-8-chloro-6-[(methoxymethylamino)carbonyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



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ACCESSION NUMBER: 2004:559501 HCAPLUS

DOCUMENT NUMBER: 141:106498

TITLE: Preparation of tricyclic antitumor compounds as farnesyl protein transferase inhibitors

INVENTOR(S): Zhu, Hugh Y.; Njoroge, F. George; Cooper, Alan B.; Guzi, Timothy; Rane, Dinanath F.; Minor, Keith P.; Doll, Ronald J.; Girijavallabhan, Viyyoor M.; Santhanam, Bama; Pinto, Patrick A.; Vibulbhan, Bancha; Keertikar, Kartik M.; Alvarez, Carmen S.; Baldwin, John J.; Li, Ge; Huang, Chia-yu; James, Ray A.; Bishop, W. Robert; Wang, James J.-S.; Desai, Jagdish A.

PATENT ASSIGNEE(S): Schering Corporation, USA

SOURCE: U.S. Pat. Appl. Publ., 731 pp., Cont.-in-part of U.S. Ser. No. 85,896.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 6

PATENT INFORMATION:

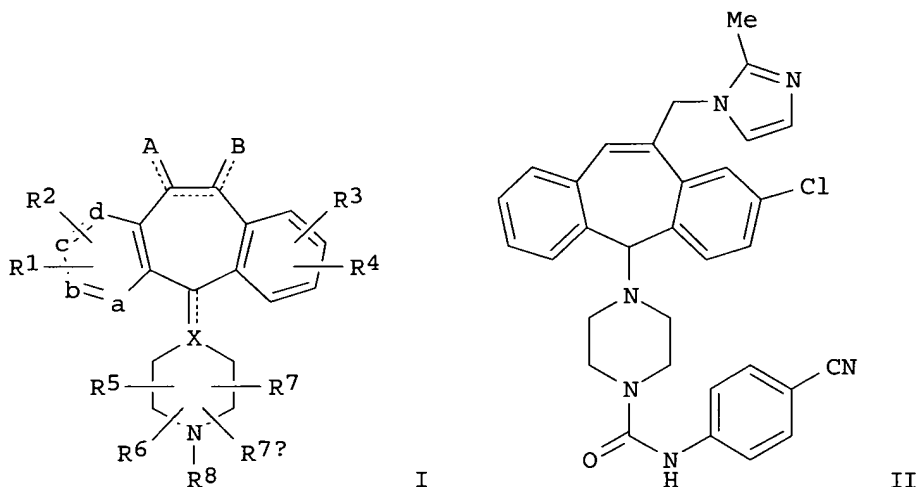
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004122018	A1	20040624	US 2002-325896	20021219
US 2002198216	A1	20021226	US 2001-940811	20010828

US 2003229099  
US 2004122018  
PRIORITY APPLN. INFO.:

A1 20031211  
A1 20040624

US 2002-85896 20020227  
US 2002-325896 20021219  
US 2001-940811 A2 20010828  
US 2002-85896 A2 20020227  
US 2002-325896 A 20021219  
US 2000-229183P P 20000830

GI



AB Title benzo[5,6]cyclohepta[1,2-b]pyridines and analogs (I) [wherein one of a, b, d, e = N, N=O; remaining a, b, d, e = C substituted with R1 or R2; or each a, b, d, e = C substituted with R1 or R2; X = N, C, CH; A, B = independently H, (un)substituted R9, carbamoyl(alkyl), amino(alkyl), acylamino(alkyl), ureido(alkyl), etc.; R1-R4 = independently H, halo, CF3, alkoxy, amino, NO2, CN, alkyl, alkenyl, alkynyl, etc.; R5-R7a = independently H, CF3, acyl, alkyl, aryl; R8 = H, alkoxycarbonyl, aryloxycarbonyl, alkylsulfonyl, arylsulfonyl, etc.; R9 = (un)substituted heteroaryl(alkyl), arylalkoxy, heterocycl(alkyl), etc.; and stereoisomers, pharmaceutically acceptable salts, solvates, and prodrugs thereof] were prepared as farnesyl protein transferase (FPT) inhibitors. For example, a multi-step synthesis starting from tert-Bu 4-[8-chloro-6-(hydroxymethyl)-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-1-piperazinecarboxylate, 2-methylimidazole, and p-cyanophenyl isocyanate gave (S)-II. The latter inhibited tumor growth of mouse H-Ras fibroblasts, HTB-177 human non-small cell lung cancer cells, and LOX human melanoma cells by 98% (60 MPK, p.o., BID, x2), 96% (80 MPK, p.o., BID, x3), and 90.3% (60 MPK, p.o., BID, x1), resp. Compds. of the invention inhibited FPT activity with IC50 values in the range of 0.05 nM to 100 nM and suppressed anchorage-independent growth of human tumor cells in a soft agar assay with IC50 values in the range of <0.5 nM to 50 nM. Thus, I and their pharmaceutical compns. are useful for the treatment of proliferative diseases, such as cancer.

IT 592553-84-9P 592553-86-1P 592553-92-9P  
592553-98-5P 592554-00-2P 592554-01-3P  
592554-02-4P 592554-03-5P 721441-47-0P  
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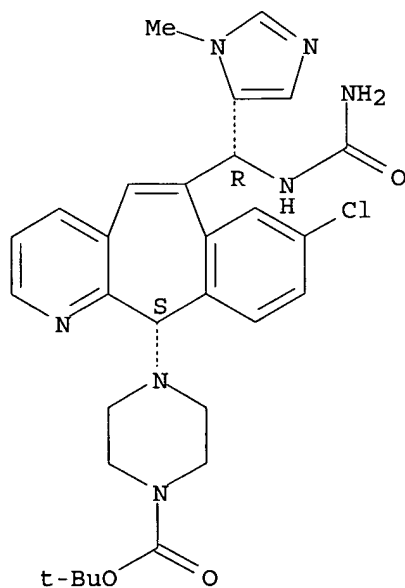
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(FPT inhibitor; preparation of tricyclic antitumor agents as farnesyl protein transferase inhibitors for treatment of cancer and other proliferative diseases)

RN 592553-84-9 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

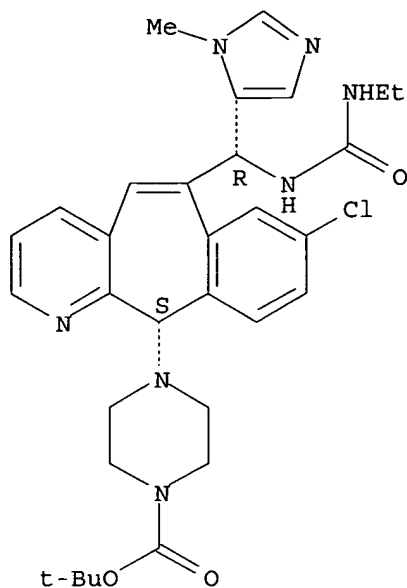
Absolute stereochemistry.



RN 592553-86-1 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(R)-[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

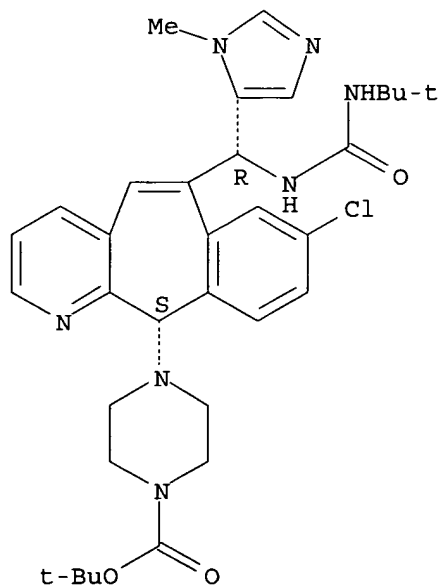
Absolute stereochemistry.



RN 592553-92-9 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1,1-dimethylethyl ester, stereoisomer (9CI) (CA INDEX NAME)

Absolute stereochemistry.

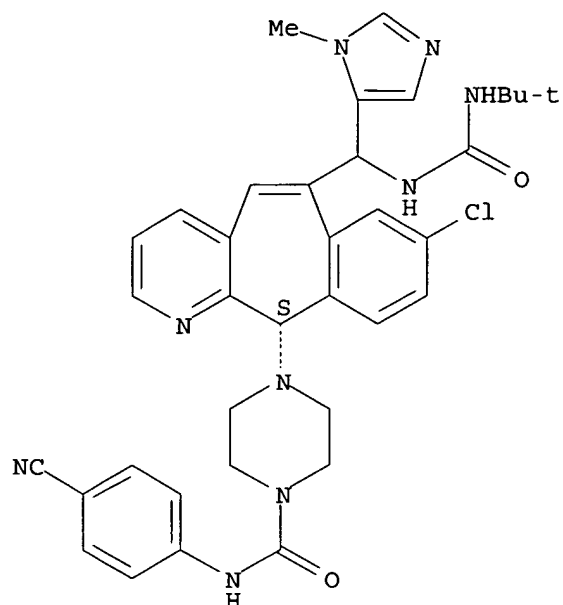


RN 592553-98-5 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-cyanophenyl)- (9CI) (CA INDEX NAME)



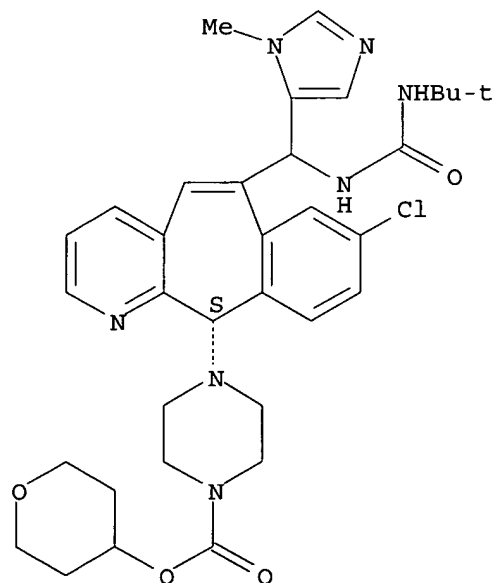
Absolute stereochemistry.



RN 592554-00-2 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, tetrahydro-2H-pyran-4-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

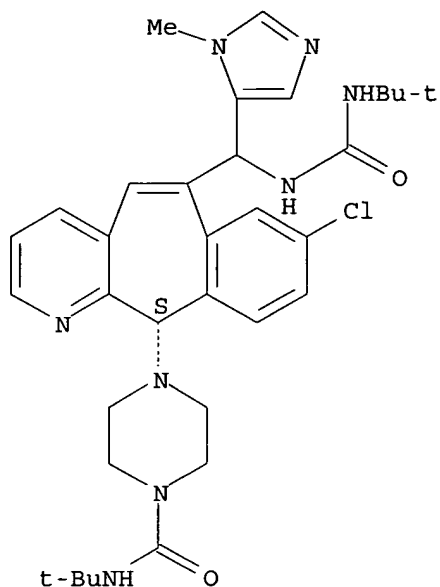


RN 592554-01-3 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-

benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(1,1-dimethylethyl)- (9CI)  
(CA INDEX NAME)

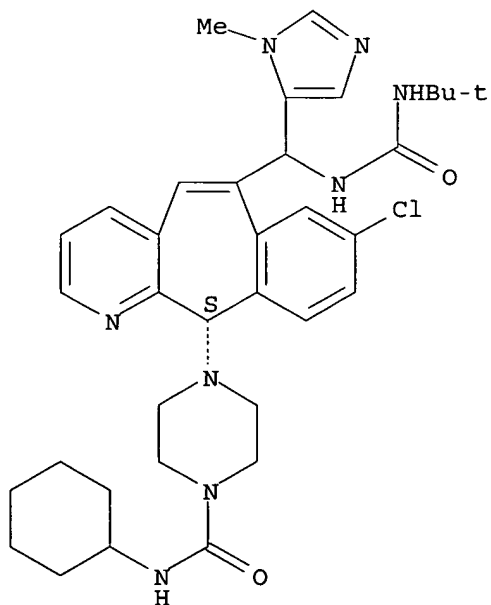
Absolute stereochemistry.



RN 592554-02-4 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-cyclohexyl- (9CI) (CA INDEX NAME)

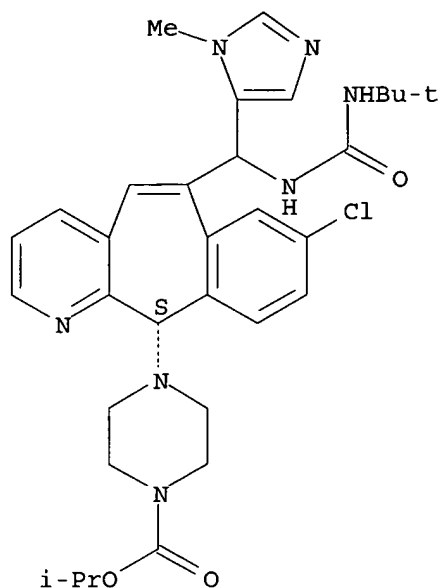
Absolute stereochemistry.



RN 592554-03-5 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1-methylethyl ester (9CI) (CA INDEX NAME)

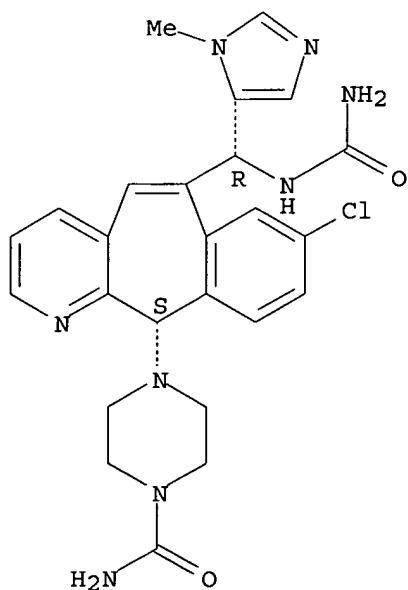
Absolute stereochemistry.



RN 721441-47-0 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]- (9CI) (CA INDEX NAME)

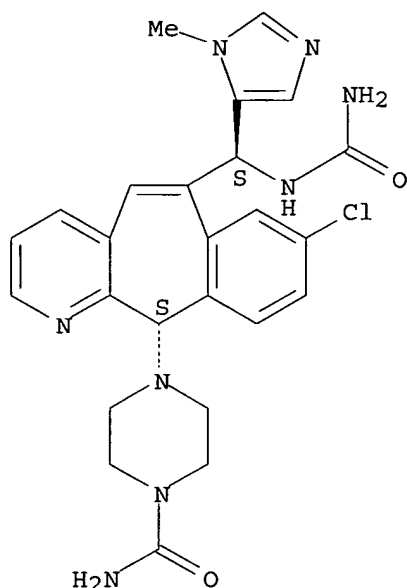
Absolute stereochemistry.



RN 721441-48-1 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-(9CI) (CA INDEX NAME)

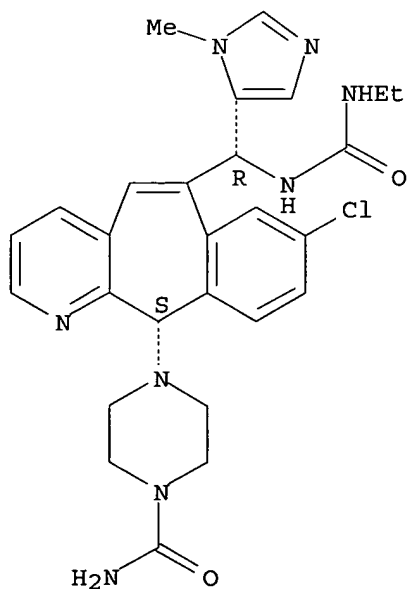
Absolute stereochemistry.



RN 721441-49-2 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-(9CI) (CA INDEX NAME)

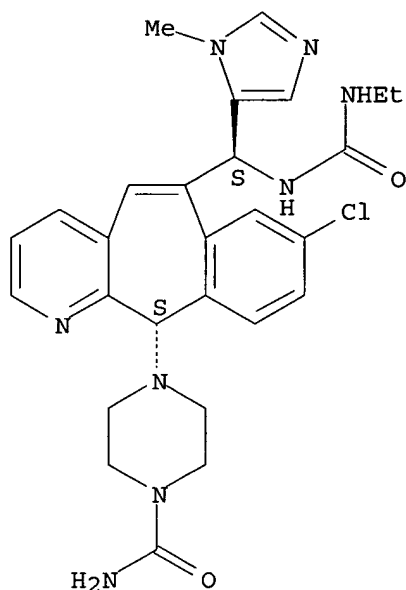
Absolute stereochemistry.



RN 721441-50-5 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-  
 [[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-  
 benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]- (9CI) (CA INDEX NAME)

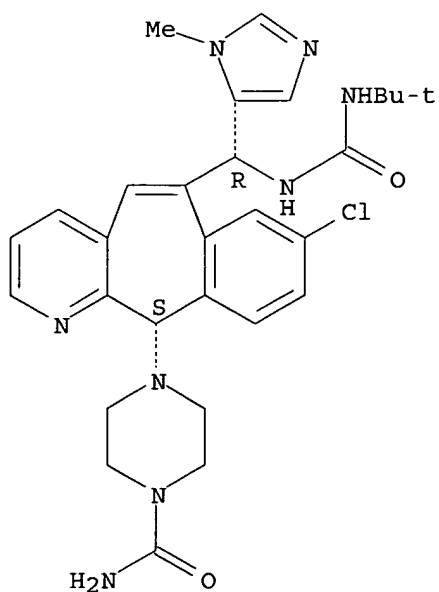
Absolute stereochemistry.



RN 721441-53-8 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-  
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 benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]- (9CI) (CA INDEX NAME)

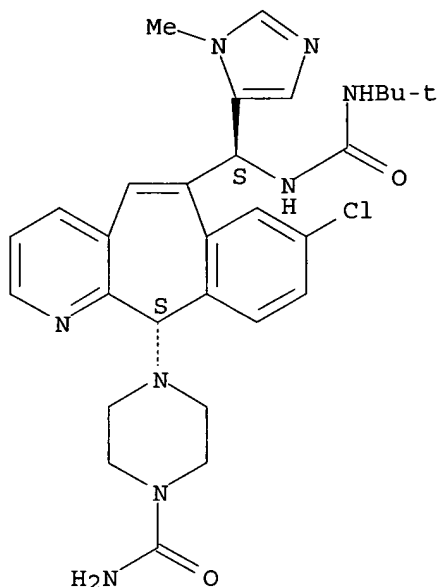
Absolute stereochemistry.



RN 721441-54-9 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]- (9CI) (CA INDEX NAME)

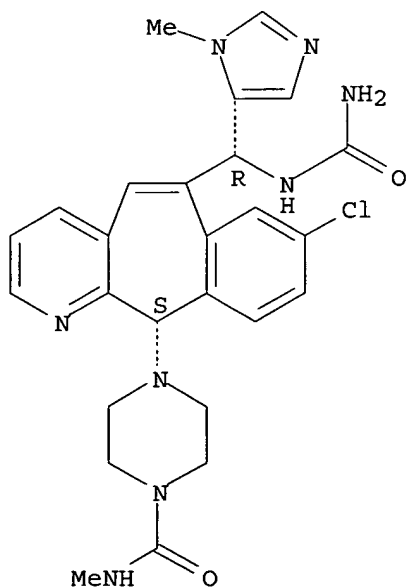
Absolute stereochemistry.



RN 721441-65-2 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-methyl- (9CI) (CA INDEX NAME)

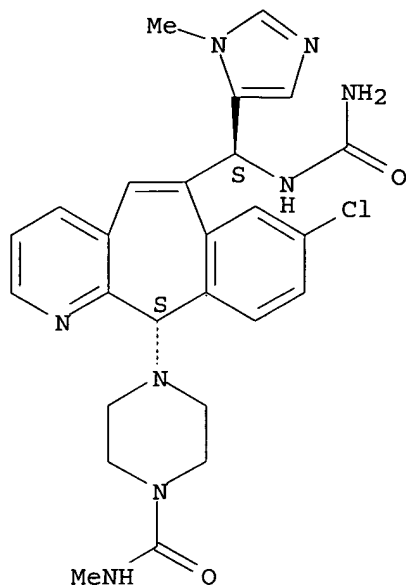
Absolute stereochemistry.



RN 721441-66-3 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-methyl- (9CI) (CA INDEX NAME)

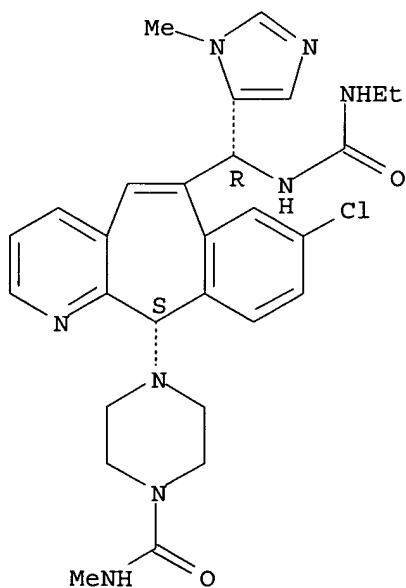
Absolute stereochemistry.



RN 721441-67-4 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-methyl- (9CI) (CA INDEX NAME)

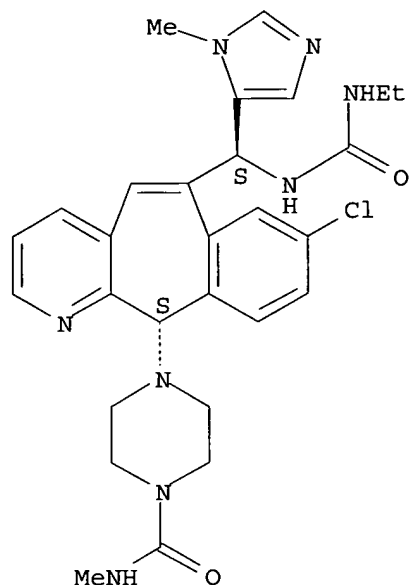
Absolute stereochemistry.



RN 721441-68-5 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-  
 [[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-  
 benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-methyl- (9CI) (CA INDEX NAME)

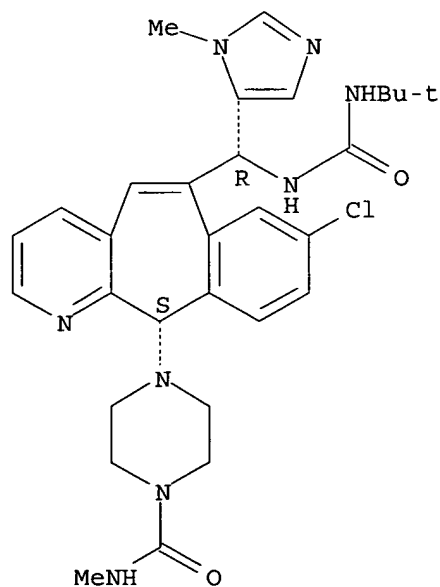
Absolute stereochemistry.



RN 721441-73-2 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-  
 dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-  
 benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

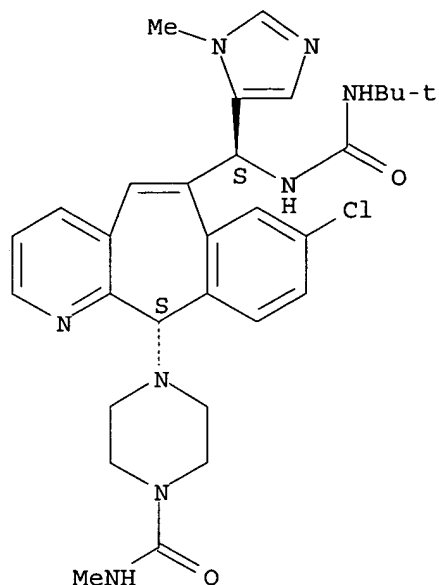




RN 721441-74-3 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-methyl- (9CI) (CA INDEX NAME)

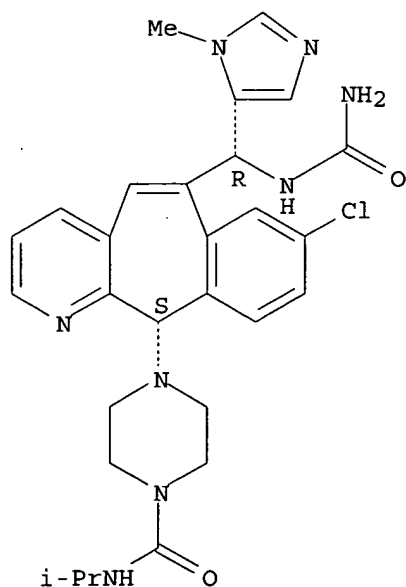
Absolute stereochemistry.



RN 721441-85-6 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(1-methylethyl)- (9CI) (CA INDEX NAME)

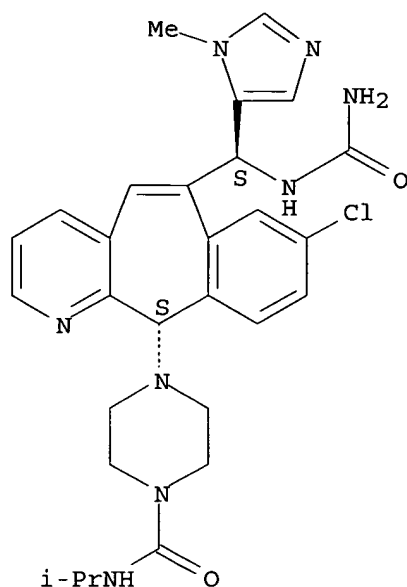
Absolute stereochemistry.



RN 721441-86-7 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(1-methylethyl)- (9CI) (CA INDEX NAME)

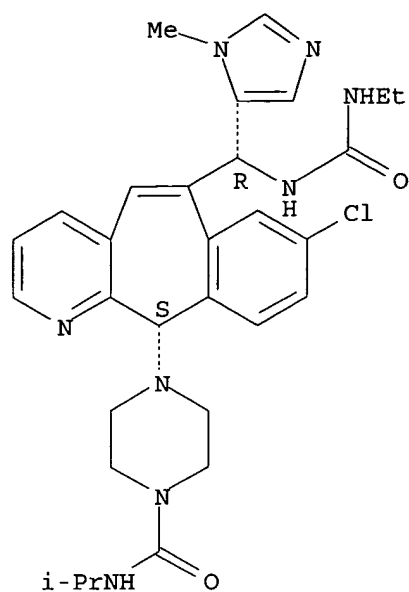
Absolute stereochemistry.



RN 721441-87-8 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(1-methylethyl)- (9CI) (CA INDEX NAME)

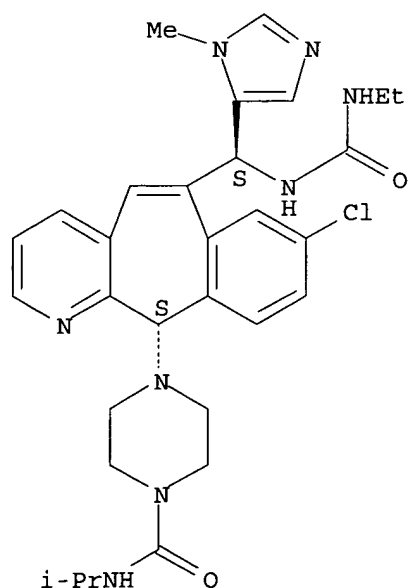
Absolute stereochemistry.



RN 721441-88-9 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-  
[[ (ethylamino) carbonyl] amino] (1-methyl-1H-imidazol-5-yl)methyl]-11H-  
benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(1-methylethyl)- (9CI) (CA  
INDEX NAME)

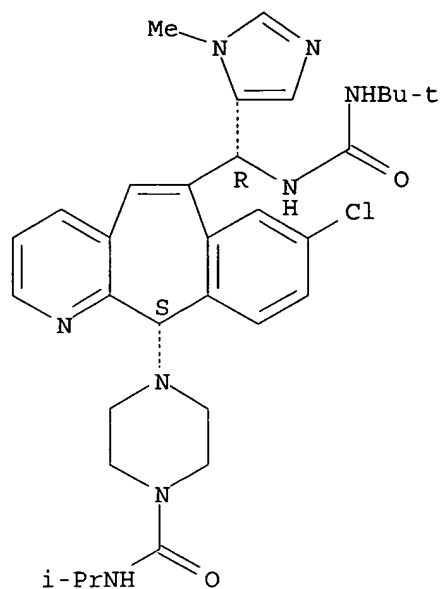
Absolute stereochemistry.



RN 721441-93-6 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-  
dimethylethyl) amino] carbonyl] amino] (1-methyl-1H-imidazol-5-yl)methyl]-11H-  
benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(1-methylethyl)- (9CI) (CA  
INDEX NAME)

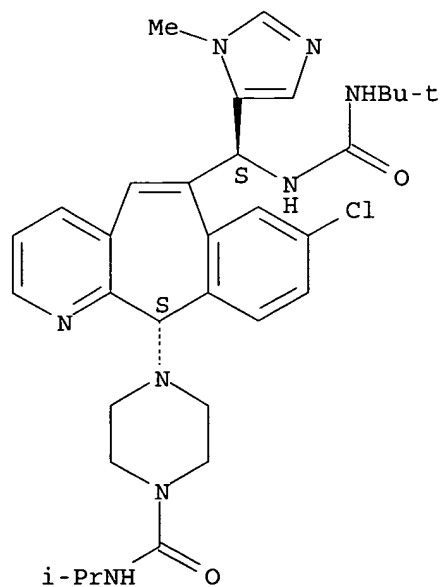
Absolute stereochemistry.



RN 721441-94-7 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(1-methylethyl)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

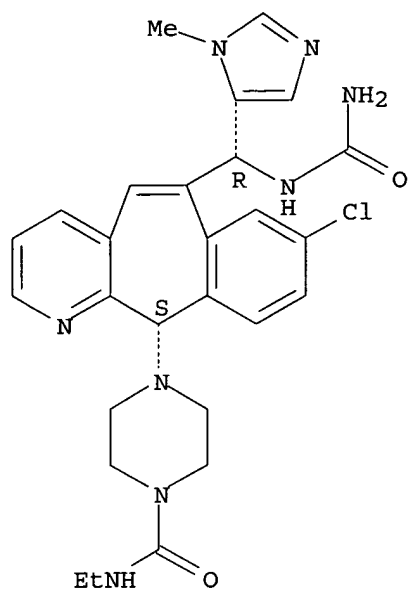


RN 721442-05-3 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-

11-yl]-N-ethyl- (9CI) (CA INDEX NAME)

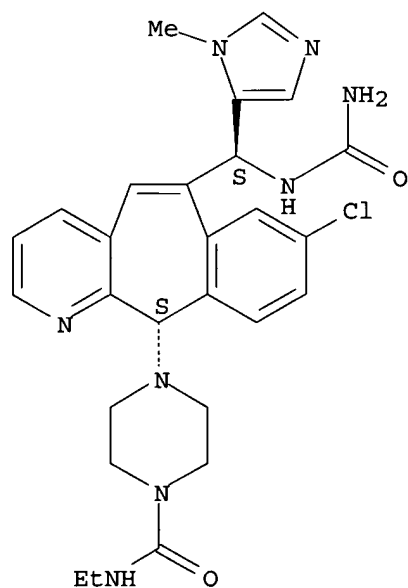
Absolute stereochemistry.



RN 721442-06-4 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-ethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



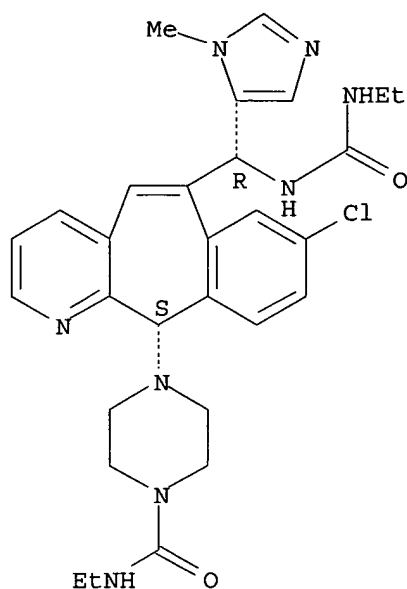
RN 721442-07-5 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-

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benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-ethyl- (9CI) (CA INDEX NAME)

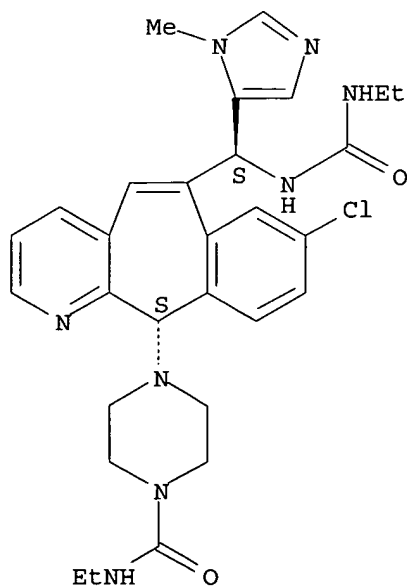
Absolute stereochemistry.



RN 721442-08-6 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-  
[[ (ethylamino)carbonyl]amino] (1-methyl-1H-imidazol-5-yl)methyl]-11H-  
benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-ethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

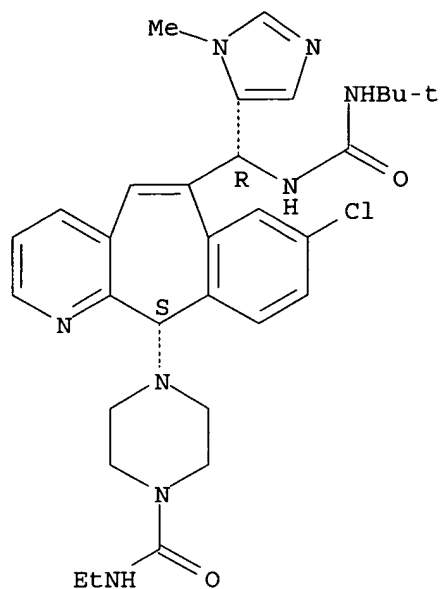


RN 721442-16-6 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-  
dimethylethyl)amino]carbonyl]amino] (1-methyl-1H-imidazol-5-yl)methyl]-11H-

benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-ethyl- (9CI) (CA INDEX NAME)

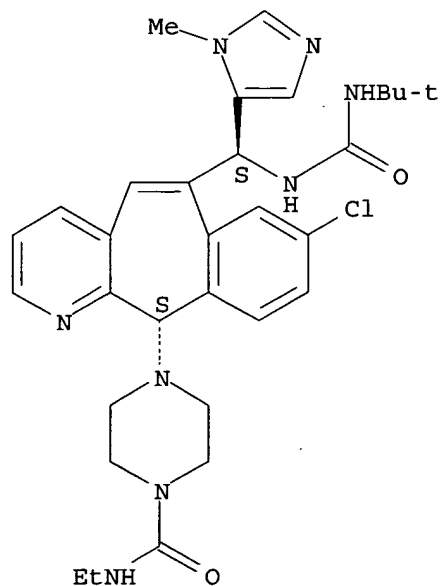
Absolute stereochemistry.



RN 721442-18-8 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-ethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



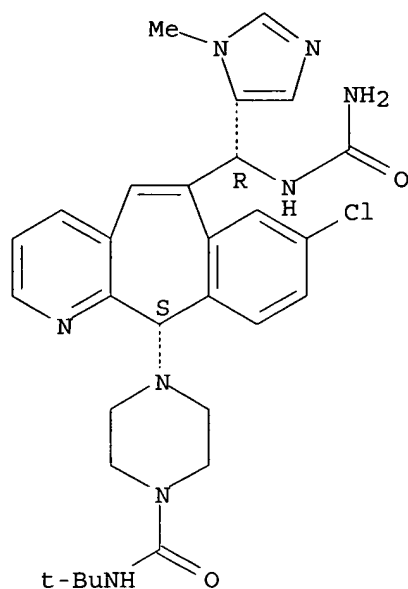
RN 721442-24-6 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-

Pryor 10\_637163

11-yl]-N-(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)

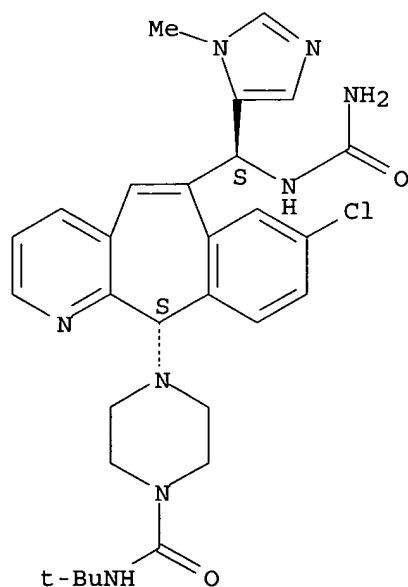
Absolute stereochemistry.



RN 721442-25-7 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



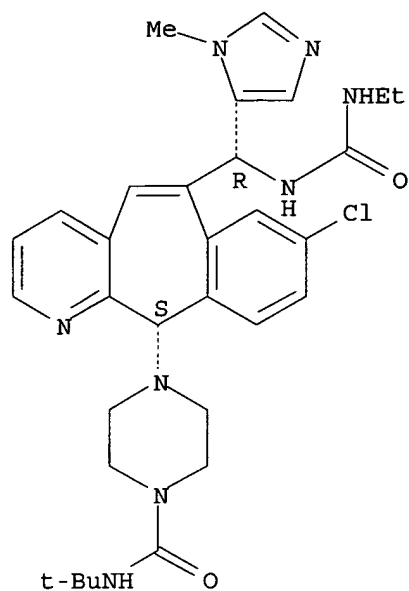
RN 721442-26-8 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-



benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(1,1-dimethylethyl)- (9CI)  
(CA INDEX NAME)

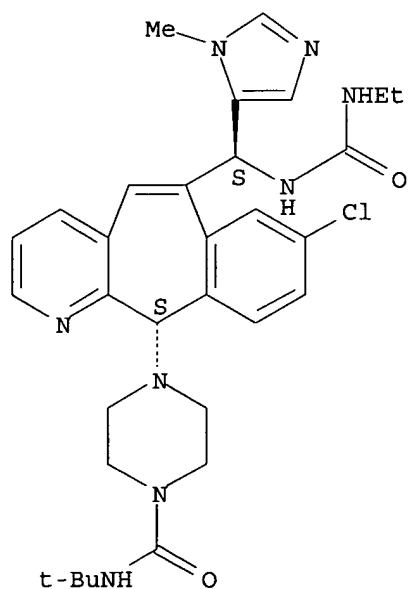
Absolute stereochemistry.



RN 721442-27-9 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-  
[[ (ethylamino) carbonyl] amino] (1-methyl-1H-imidazol-5-yl)methyl]-11H-  
benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(1,1-dimethylethyl)- (9CI)  
(CA INDEX NAME)

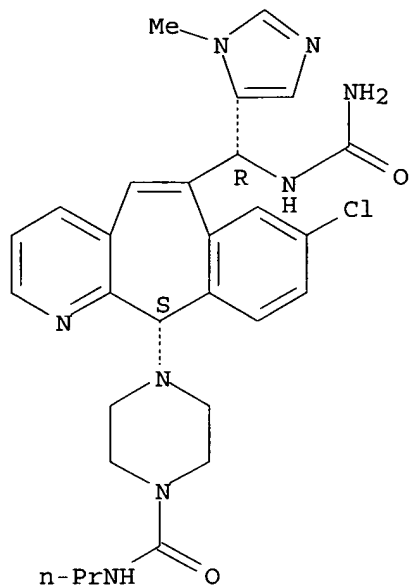
Absolute stereochemistry.



RN 721442-40-6 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-propyl- (9CI) (CA INDEX NAME)

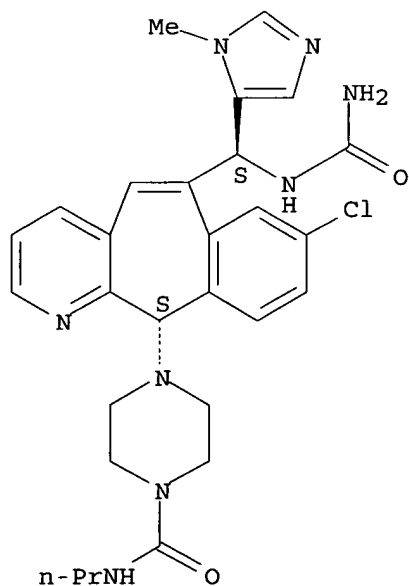
Absolute stereochemistry.



RN 721442-41-7 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

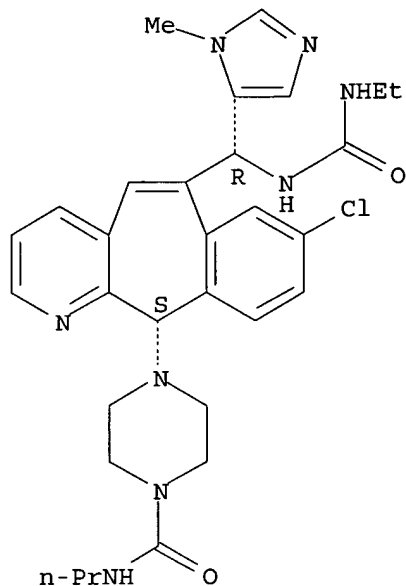


RN 721442-42-8 HCAPLUS

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CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-  
[[[(ethylamino) carbonyl] amino] (1-methyl-1H-imidazol-5-yl)methyl]-11H-  
benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-propyl- (9CI) (CA INDEX NAME)

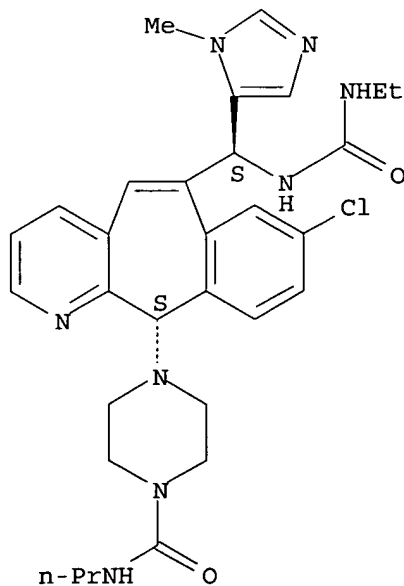
Absolute stereochemistry.



RN 721442-43-9 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-  
[[[(ethylamino) carbonyl] amino] (1-methyl-1H-imidazol-5-yl)methyl]-11H-  
benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-propyl- (9CI) (CA INDEX NAME)

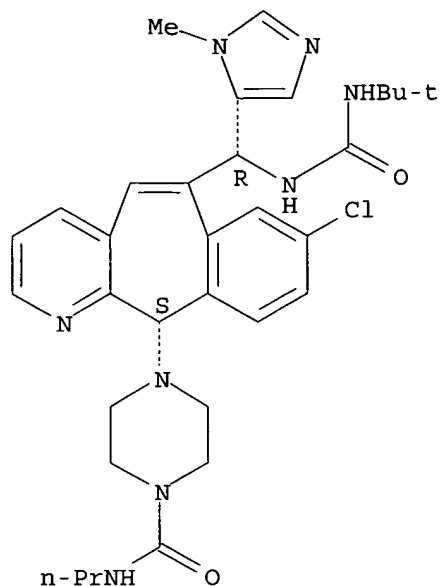
Absolute stereochemistry.



RN 721442-48-4 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-propyl- (9CI) (CA INDEX NAME)

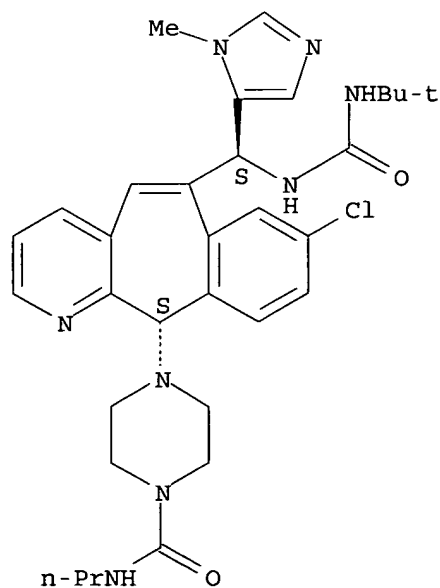
Absolute stereochemistry.



RN 721442-49-5 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-propyl- (9CI) (CA INDEX NAME)

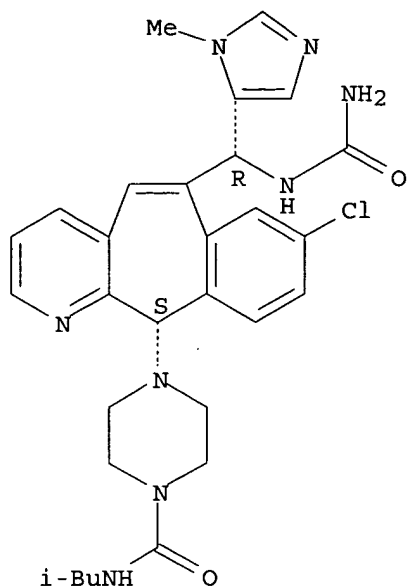
Absolute stereochemistry.



RN 721442-60-0 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(2-methylpropyl)- (9CI) (CA INDEX NAME)

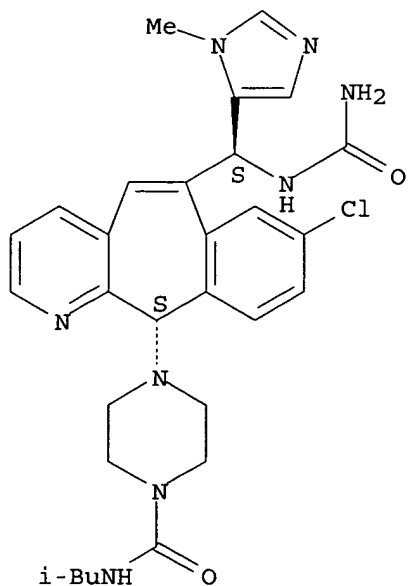
Absolute stereochemistry.



RN 721442-61-1 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(2-methylpropyl)- (9CI) (CA INDEX NAME)

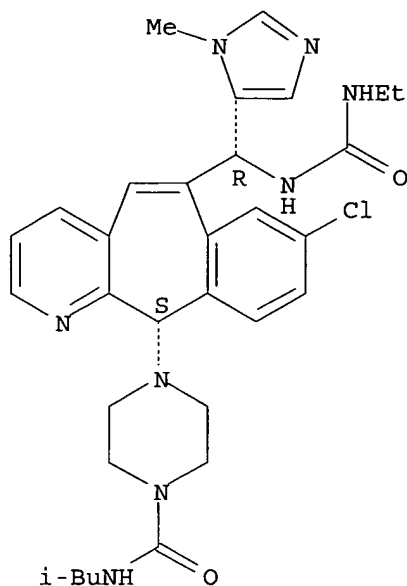
Absolute stereochemistry.



RN 721442-62-2 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-  
 [[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-  
 benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(2-methylpropyl)- (9CI) (CA  
 INDEX NAME)

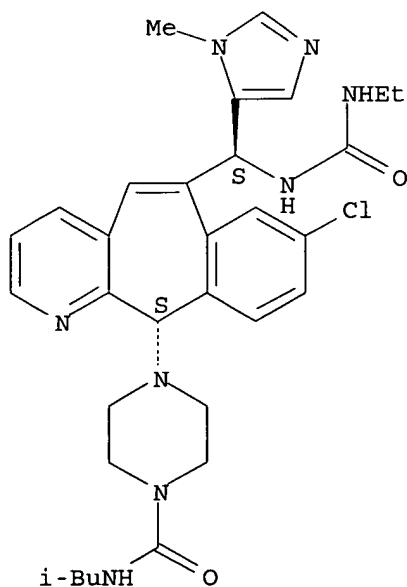
Absolute stereochemistry.



RN 721442-63-3 HCAPLUS

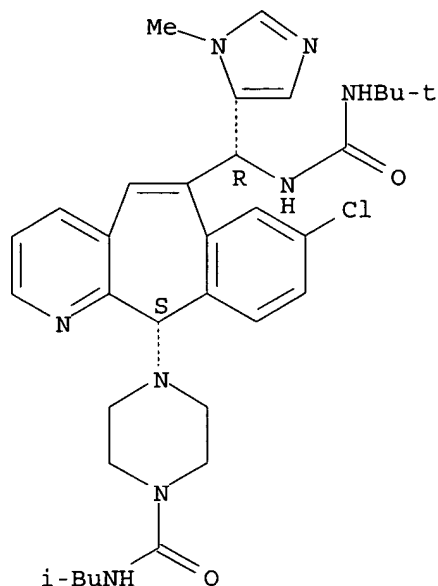
CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-  
 [[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-  
 benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(2-methylpropyl)- (9CI) (CA  
 INDEX NAME)

Absolute stereochemistry.



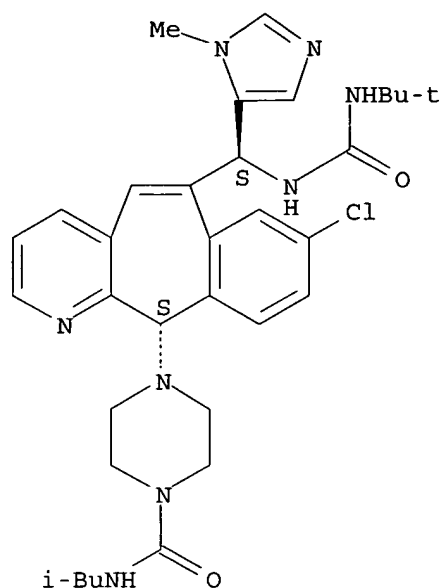
RN 721442-70-2 HCAPLUS  
 CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(2-methylpropyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 721442-71-3 HCAPLUS  
 CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(2-methylpropyl)- (9CI) (CA INDEX NAME)

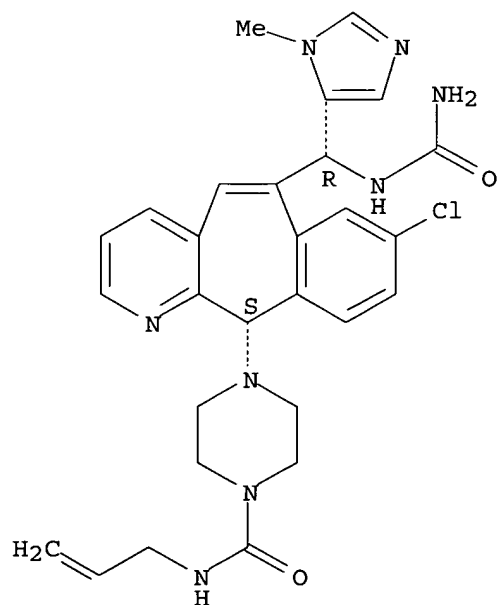
Absolute stereochemistry.



RN 721442-82-6 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-2-propenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

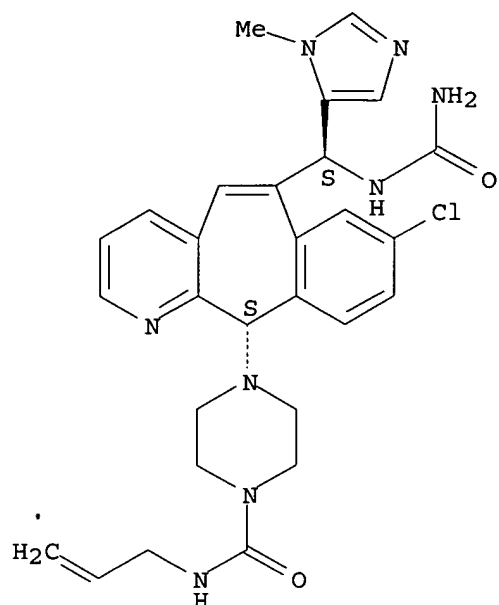


RN 721442-83-7 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-2-propenyl- (9CI) (CA INDEX NAME)



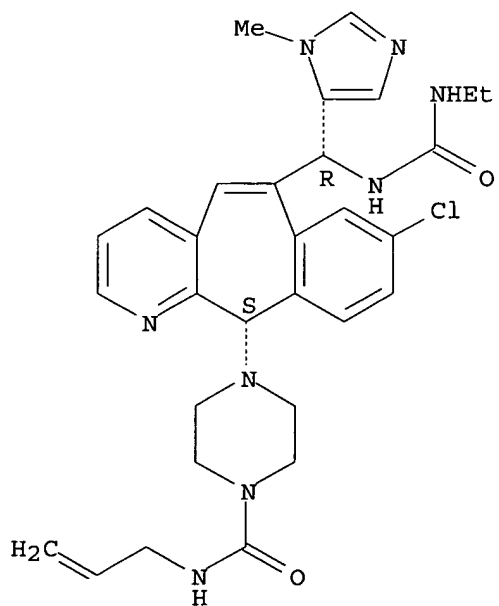
Absolute stereochemistry.



RN 721442-84-8 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-  
[[ (ethylamino) carbonyl] amino] (1-methyl-1H-imidazol-5-yl)methyl]-11H-  
benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-2-propenyl- (9CI) (CA INDEX  
NAME)

Absolute stereochemistry.



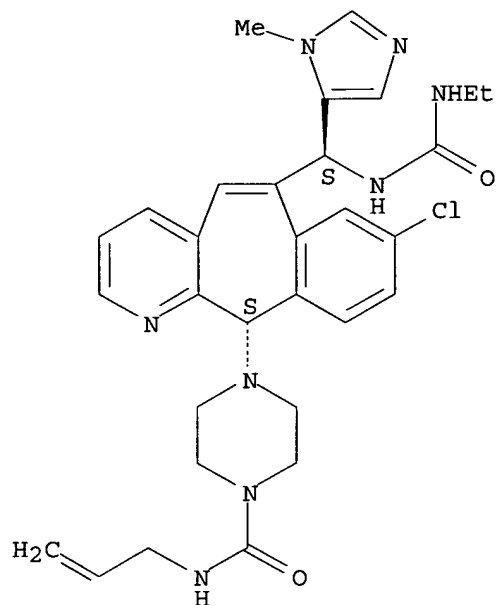
RN 721442-85-9 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-

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[[ (ethylamino) carbonyl] amino] (1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-2-propenyl- (9CI) (CA INDEX NAME)

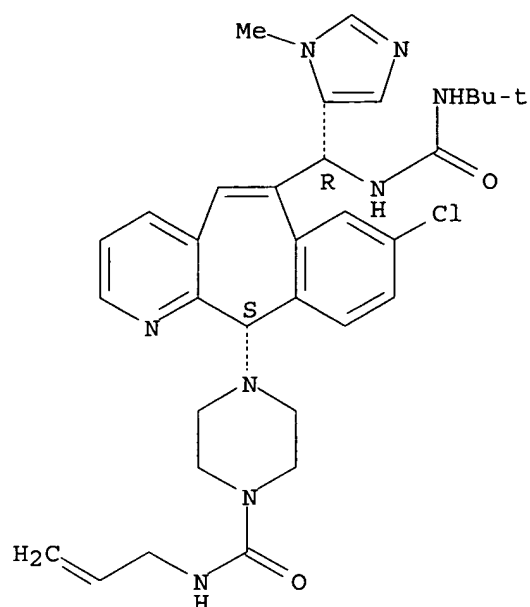
Absolute stereochemistry.



RN 721442-90-6 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-2-propenyl- (9CI) (CA INDEX NAME)

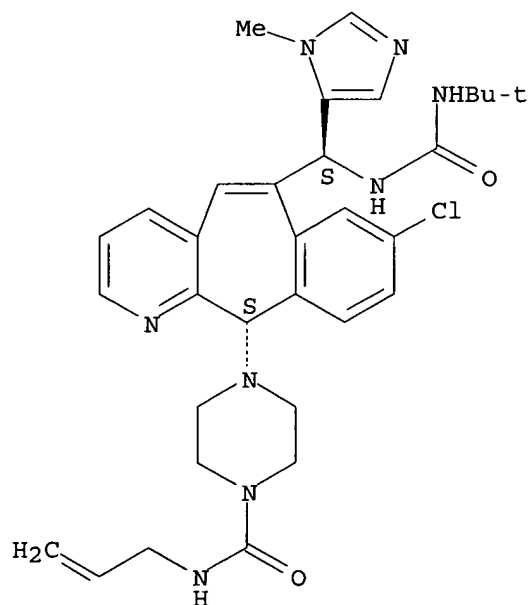
Absolute stereochemistry.



RN 721442-91-7 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-2-propenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



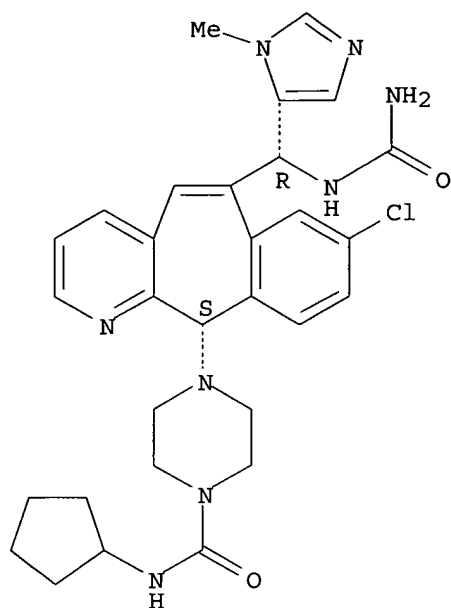
RN 721443-02-3 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-

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11-yl]-N-cyclopentyl- (9CI) (CA INDEX NAME)

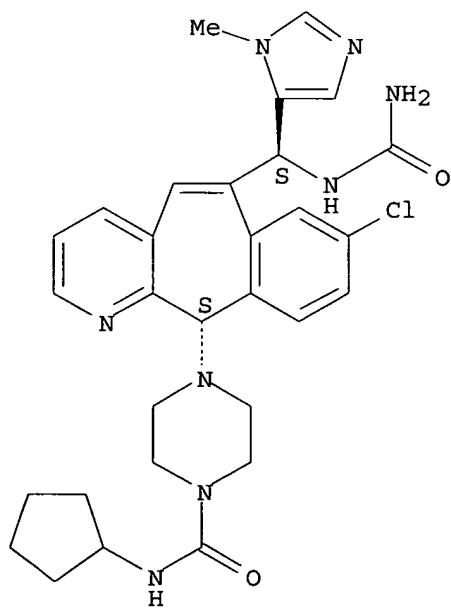
Absolute stereochemistry.



RN 721443-03-4 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-cyclopentyl- (9CI) (CA INDEX NAME)

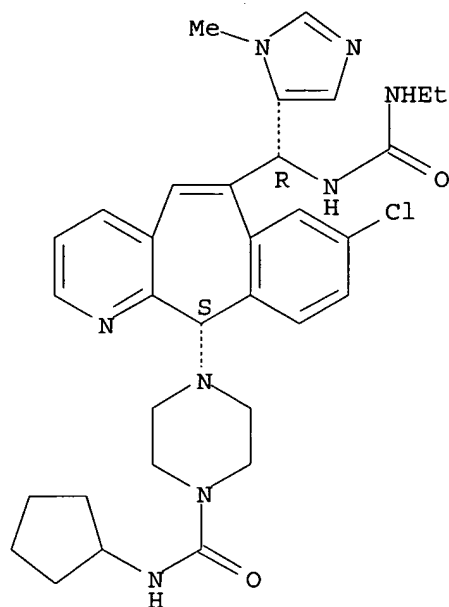
Absolute stereochemistry.



RN 721443-04-5 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-  
 [[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-  
 benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-cyclopentyl- (9CI) (CA INDEX  
 NAME)

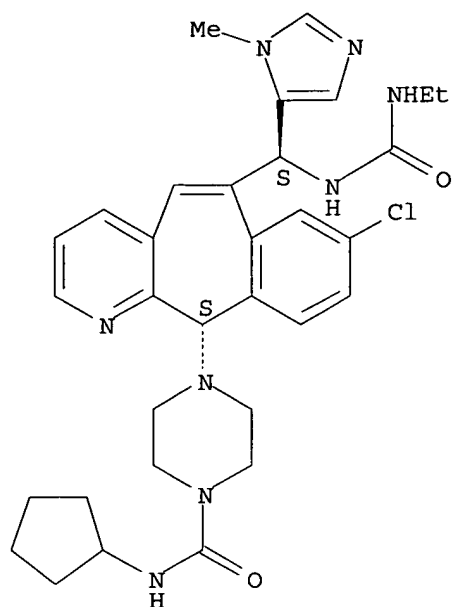
Absolute stereochemistry.



RN 721443-05-6 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-  
 [[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-  
 benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-cyclopentyl- (9CI) (CA INDEX  
 NAME)

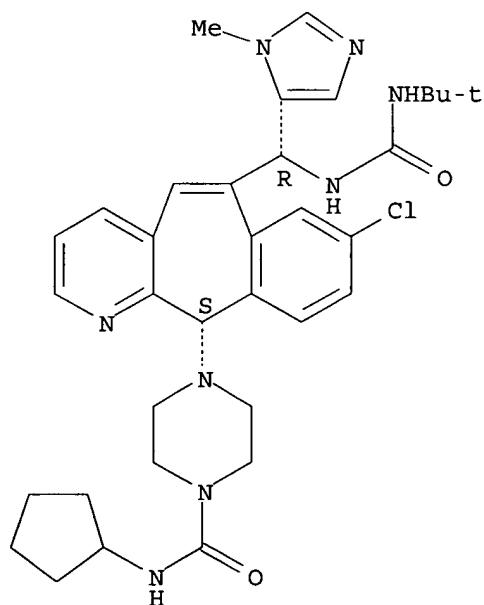
Absolute stereochemistry.



RN 721443-10-3 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-cyclopentyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

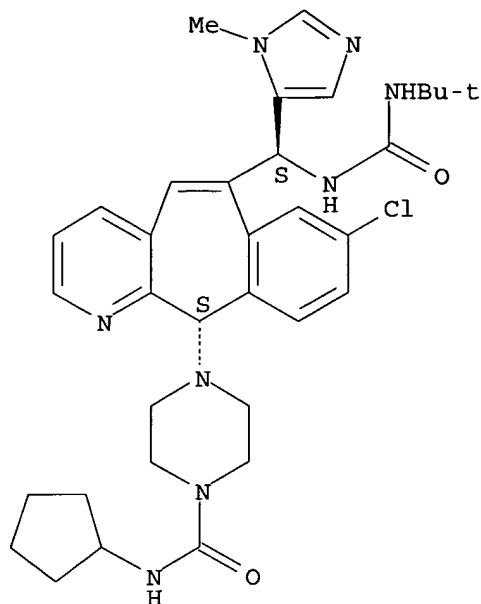


RN 721443-11-4 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-

benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-cyclopentyl- (9CI) (CA INDEX NAME)

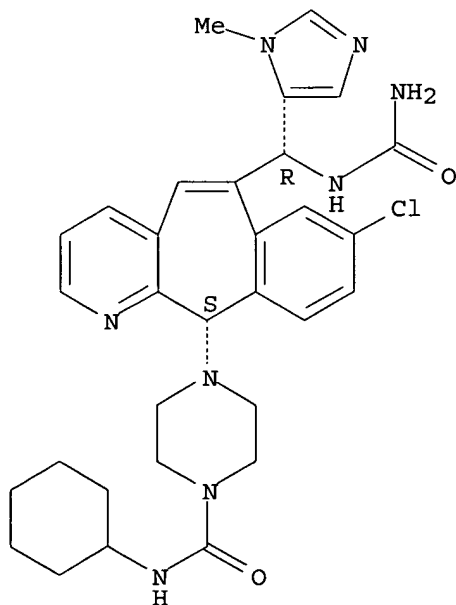
Absolute stereochemistry.



RN 721443-20-5 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-cyclohexyl- (9CI) (CA INDEX NAME)

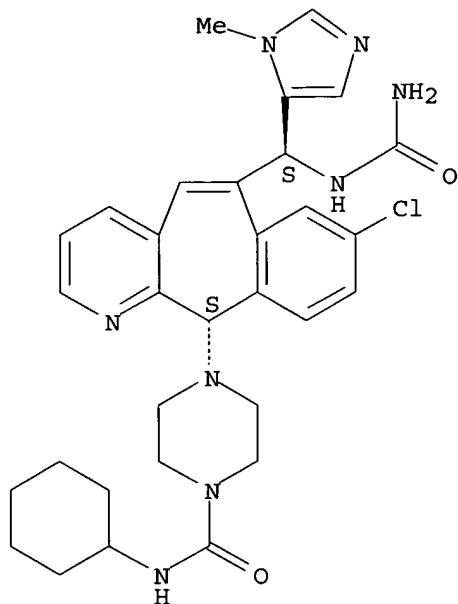
Absolute stereochemistry.



RN 721443-21-6 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-cyclohexyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

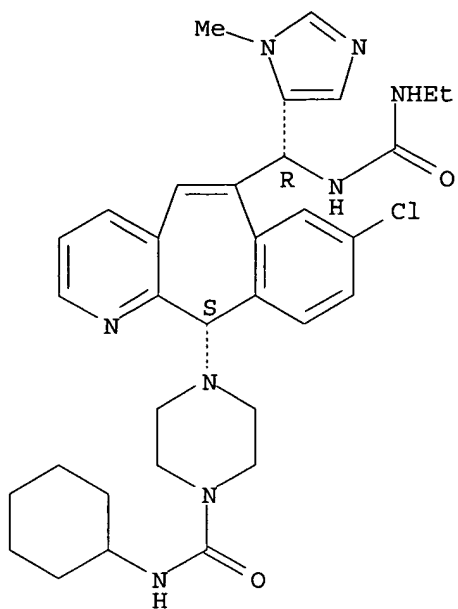


RN 721443-22-7 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-cyclohexyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

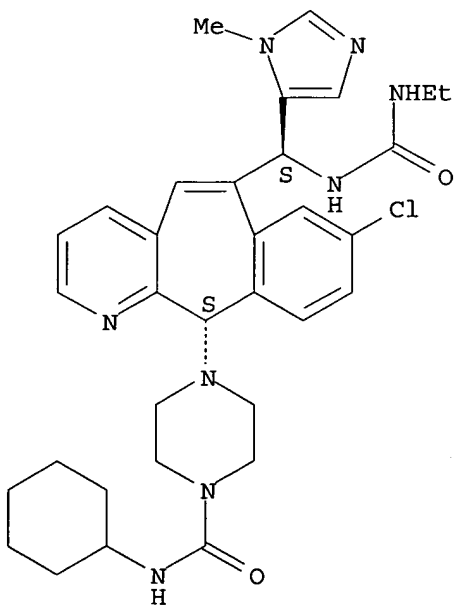




RN 721443-23-8 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-  
[[ (ethylamino) carbonyl] amino] (1-methyl-1H-imidazol-5-yl)methyl]-11H-  
benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-cyclohexyl- (9CI) (CA INDEX  
NAME)

Absolute stereochemistry.



L12 ANSWER 4 OF 38 HCAPLUS . COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2003:971730 HCAPLUS

DOCUMENT NUMBER: 140:27844  
 TITLE: Preparation of tricyclic antitumor compounds as farnesyl protein transferase inhibitors  
 INVENTOR(S): Zhu, Hugh Y.; Njoroge, F. George; Cooper, Alan B.; Guzi, Timothy; Rane, Dinanath F.; Minor, Keith P.; Doll, Ronald J.; Girijavallabhan, Viyyoor M.; Santhanam, Bama; Pinto, Patrick A.; Vibulbhan, Bancha; Keertikar, Kartik M.; Alvarez, Carmen S.; Baldwin, John J.; Li, Ge; Huang, Chia-Yu; James, Ray A.; Bishop, W. Robert; Wang, James J. S.; Desai, Jagdish A.  
 PATENT ASSIGNEE(S): USA  
 SOURCE: U.S. Pat. Appl. Publ., 519 pp., Cont.-in-part of U.S. Pat. Appl. 2002 198,216.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 4  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003229099	A1	20031211	US 2002-85896	20020227
US 2002198216	A1	20021226	US 2001-940811	20010828
US 2004122018	A1	20040624	US 2002-325896	20021219
CA 2477328	AA	20030904	CA 2003-2477328	20030225
WO 2003072549	A1	20030904	WO 2003-US5479	20030225
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, HR, HU, ID, IL, IN, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LU, LV, MA, MD, MG, MK, MN, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SC, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UZ, VC, VN, YU, ZA, ZM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003215389	A1	20030909	AU 2003-215389	20030225
BR 2003008071	A	20041221	BR 2003-8071	20030225
EP 1492772	A1	20050105	EP 2003-711214	20030225
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2005525356	T2	20050825	JP 2003-571255	20030225
ZA 2004006807	A	20050829	ZA 2004-6807	20040826
NO 2004004053	A	20041126	NO 2004-4053	20040924
PRIORITY APPLN. INFO.:			US 2000-229183P	P 20000830
			US 2001-940811	A2 20010828
			US 2002-85896	A2 20020227
			US 2002-325896	A 20021219
			WO 2003-US5479	W 20030225
OTHER SOURCE(S):		MARPAT 140:27844		
GI				

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The title compds. [I; one of a, b, d, e = N, N:O; remaining a, b, d, e = C (wherein each C atom has an R1 or R2 bound to said carbon); or each a, b, d, e = C (wherein each C atom has an R1 or R2); R1-R4 = H, halo, CF3,

alkoxy, etc.; R5-R7, R9 = H, CF<sub>3</sub>, alkyl, aryl, etc.; R8 = H, alkoxycarbonyl, aryloxycarbonyl, alkylsulfonyl, arylsulfonyl, etc.; dotted line = single or double bond; X = N, CH; A, B = (un)substituted CH, CH<sub>2</sub>], their stereoisomers, pharmaceutically acceptable salts, solvates, and prodrugs which are useful for inhibiting farnesyl protein transferase, were prepared E.g., a multi-step synthesis of II, was given. The compds. I have an FTP IC<sub>50</sub> in the range of 0.05 nM to 100 nM. Also disclosed are pharmaceutical compns. comprising title compds. I as well as methods of using them to treat proliferative diseases such as cancer.

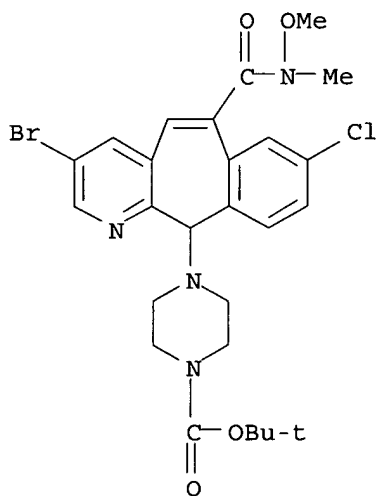
IT 592554-89-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of tricyclic antitumor compds. as farnesyl protein transferase inhibitors)

RN 592554-89-7 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[3-bromo-8-chloro-6-[(methoxymethylamino)carbonyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



L12 ANSWER 5 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:796490 HCAPLUS

DOCUMENT NUMBER: 139:307794

TITLE: Preparation of N-hydroxy (piperazinesulfonyl)- or (piperazinecarbonyl)arylpropenamides as inhibitors of histone deacetylase and antiproliferative agents for the treatment of cancer and psoriasis

INVENTOR(S): Watkins, Clare J.; Romero-Martin, Maria-Rosario; Ritchie, James; Finn, Paul W.; Kalvinsh, Ivars; Loza, Einars; Dikovska, Klara; Starchenkov, Igor; Lolya, Daina; Gailite, Vjia

PATENT ASSIGNEE(S): Prolifix Limited, UK

SOURCE: PCT Int. Appl., 217 pp.

CODEN: PIXXD2

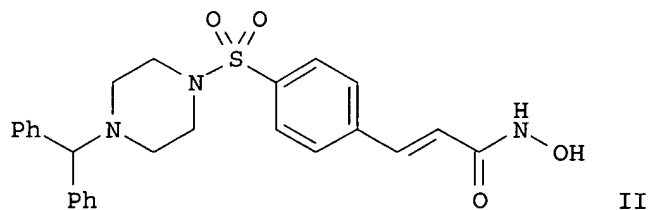
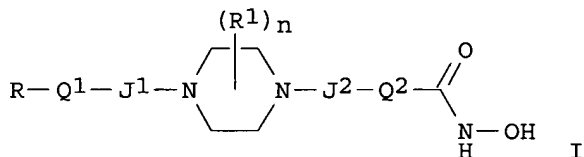
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003082288	A1	20031009	WO 2003-GB1463	20030403
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2479906	AA	20031009	CA 2003-2479906	20030403
BR 2003008908	A	20050104	BR 2003-8908	20030403
EP 1492534	A1	20050105	EP 2003-722719	20030403
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 2005143385	A1	20050630	US 2003-509732	20030403
JP 2005527556	T2	20050915	JP 2003-579825	20030403
NO 2004004744	A	20041102	NO 2004-4744	20041102
PRIORITY APPLN. INFO.:			US 2002-369337P	P 20020403
			WO 2003-GB1463	W 20030403
OTHER SOURCE(S):		MARPAT 139:307794		
GI				



AB N-hydroxyamides I [J1 = single bond, C(:O), J2 = C(:O), SO2; Q1 = single bond, OX, SX, XOY, XSY, XO, XS; Q2 = (un)substituted C4-C8 alkylene at least four carbon atoms in length; R = (un)substituted cycloalkyl, heterocycloalkyl, or aryl; R1 = C1-C4 alkyl; X, Y = (un)substituted alkanediyl; n = 0-8] containing piperazine moieties, particularly N-hydroxy piperazinesulfonylarylpropenamides such as II, are prepared as inhibitors of histone deacetylase (HDAC) for the treatment of proliferative diseases, cancer, and psoriasis in both humans and animals. Biol. data on the inhibition of HDAC in vitro, the inhibition of cellular proliferation in vitro, and the in vivo testing of I on mice containing i.p. P388 tumors are given for a subset of I. Most of the compds. I tested inhibit HDAC with IC50 values between 20 nM and 200 nM, inhibit proliferation of four cell lines with IC50 values between 1 μM and 10 μM, and give log rank

statistics for mice with P388 tumors (5 each) of between -3 and -5. II gives a log rank statistic for tumors in five mice of -9.62. Preparative data for approx. fifty of the title compds. are given.

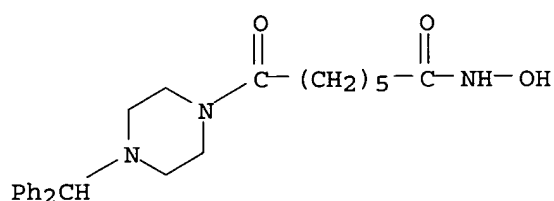
IT 610801-00-8P 610801-02-0P 610801-40-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(claimed compds.; preparation of N-hydroxy (piperazinesulfonyl)- or (piperazinecarbonyl)arylpropenamides as inhibitors of histone deacetylase and antiproliferative agents for the treatment of cancer and psoriasis)

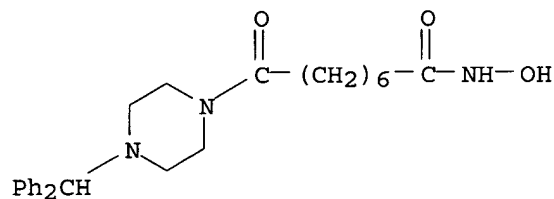
RN 610801-00-8 HCAPLUS

CN 1-Piperazineheptanamide, 4-(diphenylmethyl)-N-hydroxy- $\zeta$ -oxo- (9CI)  
(CA INDEX NAME)



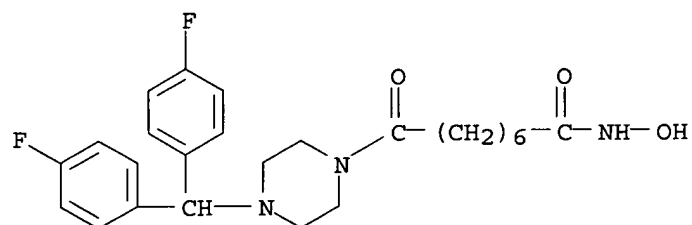
RN 610801-02-0 HCAPLUS

CN 1-Piperazineoctanamide, 4-(diphenylmethyl)-N-hydroxy- $\eta$ -oxo- (9CI) (CA INDEX NAME)



RN 610801-40-6 HCAPLUS

CN 1-Piperazineoctanamide, 4-[bis(4-fluorophenyl)methyl]-N-hydroxy- $\eta$ -oxo- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

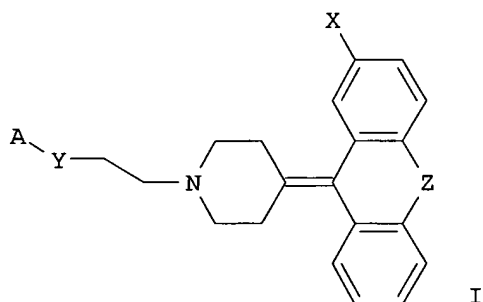
L12 ANSWER 6 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:737725 HCAPLUS

DOCUMENT NUMBER: 139:245911

TITLE: Preparation of piperidine derivatives as therapeutic agent for pain  
 INVENTOR(S): Koganei, Hajime; Iwayama, Satoshi; Takeda, Tomoko; Kito, Morikazu; Saitou, Yuki; Ono, Yukitsugu; Kihara, Hideaki; Yamamoto, Takashi; Shoji, Masataka  
 PATENT ASSIGNEE(S): Ajinomoto Co., Inc., Japan  
 SOURCE: PCT Int. Appl., 51 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003076402	A1	20030918	WO 2003-JP2993	20030313
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
JP 2005298340	A2	20051027	JP 2002-69177	20020313
AU 2003213349	A1	20030922	AU 2003-213349	20030313
PRIORITY APPLN. INFO.:			JP 2002-69177	A 20020313
			WO 2003-JP2993	W 20030313
OTHER SOURCE(S):		MARPAT 139:245911		
GI				



AB Disclosed are drugs containing as active ingredients the following piperidine derivs. (I) or analog thereof [wherein A = each (un)substituted pyridyl, piperidyl, piperidino, morpholinyl, morpholino, thiomorpholinyl, piperazinyl, C1-8 alkyl, C3-8 cycloalkyl, C1-8 alkoxy, C1-8 monoalkylamino, or C1-8 dialkylamino; X = G, halo; Y = CONH, NHCO, CONHCH<sub>2</sub>, (CH<sub>2</sub>)<sub>n</sub>, CO<sub>2</sub> (wherein n = an integer of 0-4); Z = CH:CH, SCH<sub>2</sub>, CH<sub>2</sub>S, S, CH<sub>2</sub>CH<sub>2</sub>]. These compds. I possess N-type calcium channel inhibitory activity and are reduced in influence on the central nervous system, thereby highly safe, and are useful for the treatment of pains. Thus, 55 mg 2-[4-(5H-dibenzo[a,d]cyclohepten-5-ylidene)-1-

piperidinyl]ethylamine was dissolved in 0.5 mL CH<sub>2</sub>Cl<sub>2</sub>, treated with 45.7 mg and then slowly with a solution of 14.6 mg Me chloroformate in 0.5 mL CH<sub>2</sub>Cl<sub>2</sub>, stirred for 15 min, and treated with saturated aqueous NaHCO<sub>3</sub> solution

to

give, after workup and silica gel chromatog., Me 2-[4-(5H-dibenzo[a,d]cyclohepten-5-ylidene)-1-piperidinyl]ethylcarbamate (II). II and iso-Pr 2-[4-(5H-dibenzo[a,d]cyclohepten-5-ylidene)-1-piperidinyl]ethylcarbamate inhibited N-type calcium channel by 81 and 95%, resp., in human neuroblastoma cell IMR-32.

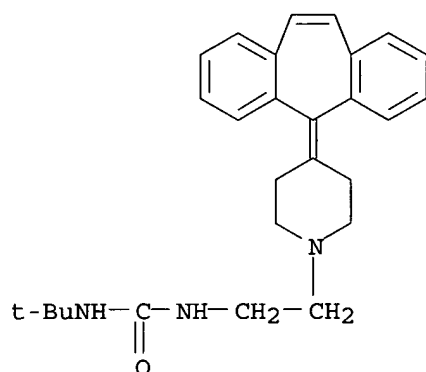
IT 599156-95-3P 599156-98-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of piperidine derivs. inhibiting N-type calcium channel as therapeutic agent for pain)

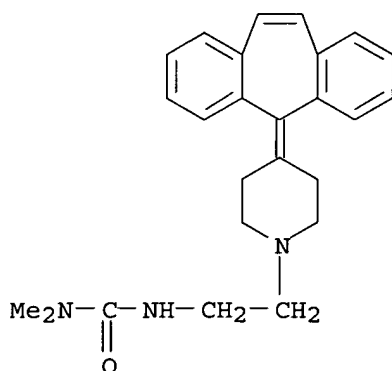
RN 599156-95-3 HCAPLUS

CN Urea, N-[2-[4-(5H-dibenzo[a,d]cyclohepten-5-ylidene)-1-piperidinyl]ethyl]-N'-(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)



RN 599156-98-6 HCAPLUS

CN Urea, N'-[2-[4-(5H-dibenzo[a,d]cyclohepten-5-ylidene)-1-piperidinyl]ethyl]-N,N-dimethyl- (9CI) (CA INDEX NAME)

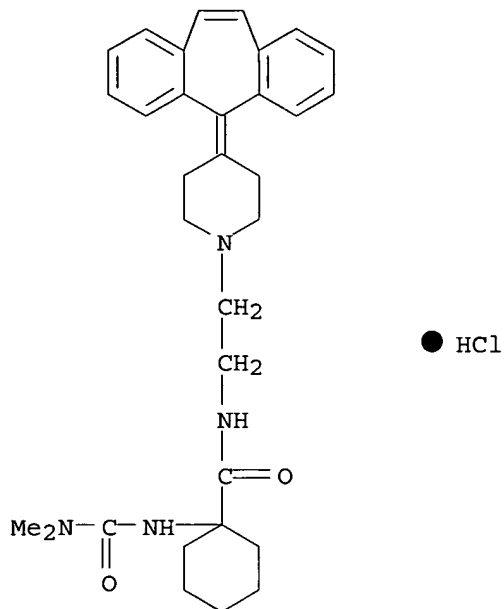


IT 599156-81-7

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(preparation of piperidine derivs. inhibiting N-type calcium channel as therapeutic agent for pain)

RN 599156-81-7 HCAPLUS  
 CN Cyclohexanecarboxamide, N-[2-[4-(5H-dibenzo[a,d]cyclohepten-5-ylidene)-1-piperidinyl]ethyl]-1-[[dimethylamino]carbonyl]amino]-, monohydrochloride (9CI) (CA INDEX NAME)



REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 7 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:696871 HCAPLUS

DOCUMENT NUMBER: 139:230790

TITLE: Preparation of piperazinylbenzocycloheptapyridines and related compounds as farnesyl protein transferase inhibitors useful as antitumor agents

INVENTOR(S): Zhu, Hugh Y.; Njoroge, F. George; Cooper, Alan B.; Guzi, Timothy J.; Rane, Dinanath F.; Minor, Keith P.; Doll, Ronald J.; Girijavallabhan, Viyyoor Moopil; Santhanam, Bama; Pinto, Patrick A.; Vibulbhan, Bancha; Keertikar, Kartik M.; Alvarez, Carmen S.; Baldwin, John J.; Li, Ge; Huang, Chia-Yu; James, Ray A.; Bishop, W. Robert; Wang, James J. S.; Desai, Jagdish A.

PATENT ASSIGNEE(S): Schering Corporation, USA; Pharmacoepia, Inc.

SOURCE: PCT Int. Appl., 560 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

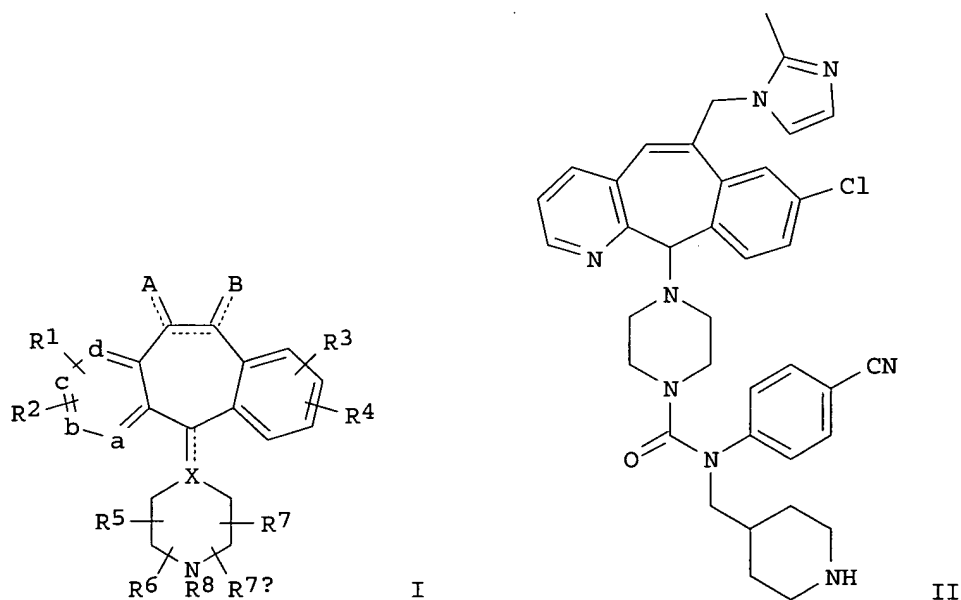
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003072549	A1	20030904	WO 2003-US5479	20030225
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, HR, HU,				



ID, IL, IN, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LU, LV, MA, MD, MG, MK, MN, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SC, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UZ, VC, VN, YU, ZA, ZM  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  
 US 2003229099 A1 20031211 US 2002-85896 20020227  
 US 2004122018 A1 20040624 US 2002-325896 20021219  
 CA 2477328 AA 20030904 CA 2003-2477328 20030225  
 AU 2003215389 A1 20030909 AU 2003-215389 20030225  
 BR 2003008071 A 20041221 BR 2003-8071 20030225  
 EP 1492772 A1 20050105 EP 2003-711214 20030225  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK  
 JP 2005525356 T2 20050825 JP 2003-571255 20030225  
 NO 2004004053 A 20041126 NO 2004-4053 20040924  
 PRIORITY APPLN. INFO.: US 2002-85896 A 20020227  
 US 2002-325896 A 20021219  
 US 2000-229183P P 20000830  
 US 2001-940811 A2 20010828  
 WO 2003-US5479 W 20030225

OTHER SOURCE(S): MARPAT 139:230790  
 GI



AB Title compds. [I; 1 of a, b, c, d = N, NO, the remainder = CR1, CR2; or a, b, c, d = CR1, CR2; dotted line = optional double bond; X = N, C, CH; A, B = H, R9, R9COR9, CONHR9, etc.; R1-R4 = H, halo, CF3, OR10, COR10, SR10, NO2, N(R10)2, cyano, tetrazolylthio, (substituted) alkyl, etc.; R5, R6, R7, R7a = H, CF3, COR10, (substituted) alkyl, aryl; R5R6 = O, S; R8 = CO2R11, SO2R11, CONR11aR12, etc.; R9 = (substituted) heteroaryl, aralkoxy, heterocycloalkyl, heteroaralkenyl, etc.; R10 = H, alkyl, aryl, aralkyl; R11 = (substituted) alkyl, aryl, cycloalkyl, heteroaryl, heterocycloalkyl,

alkenyl, dialkylamino, etc.; R11a = H, OH, (substituted) alkyl, aryl, cycloalkyl, heteroaryl, aralkyl, arylacyl, etc.; R12 = H, alkyl, piperidinyl, cycloalkyl, alkylpiperidinyl; with provisos], were prepared  
Thus, title compound (II) was prepared in several steps. I inhibited farnesyl protein transferase with IC50 = 0.05-100 nM.

IT 592553-84-9P 592553-85-0P 592553-86-1P  
592553-87-2P 592553-92-9P 592553-93-0P  
592553-98-5P 592554-00-2P 592554-01-3P  
592554-02-4P 592554-03-5P 592554-34-2P  
592554-35-3P 592554-38-6P 592554-74-0P

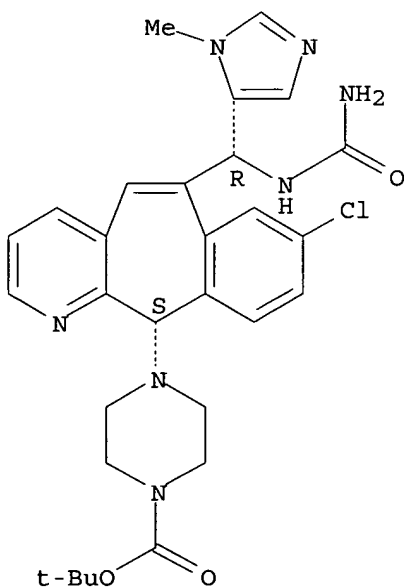
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of piperazinylbenzocycloheptapyridines and related compds. as farnesyl protein transferase inhibitors useful as antitumor agents)

RN 592553-84-9 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

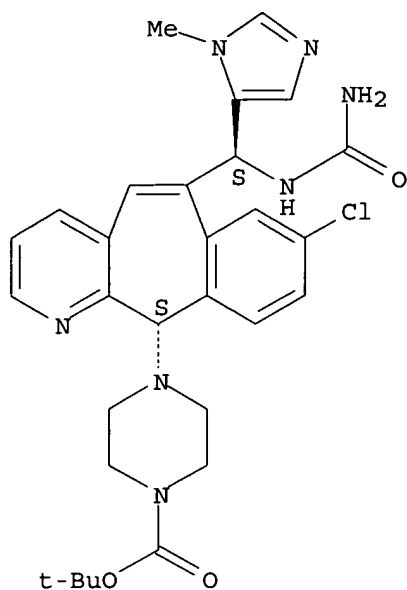
Absolute stereochemistry.



RN 592553-85-0 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

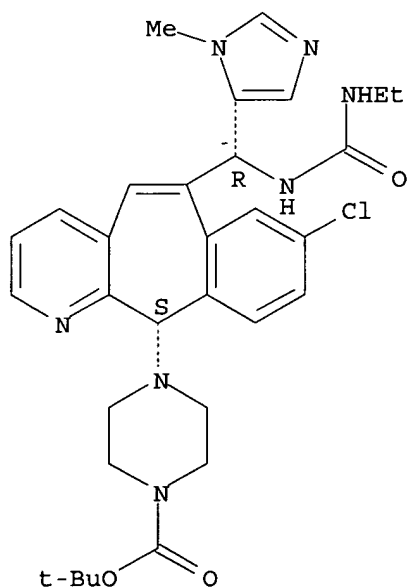
Absolute stereochemistry.



RN 592553-86-1 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(R)-  
 [[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-  
 benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1,1-dimethylethyl ester (9CI)  
 (CA INDEX NAME)

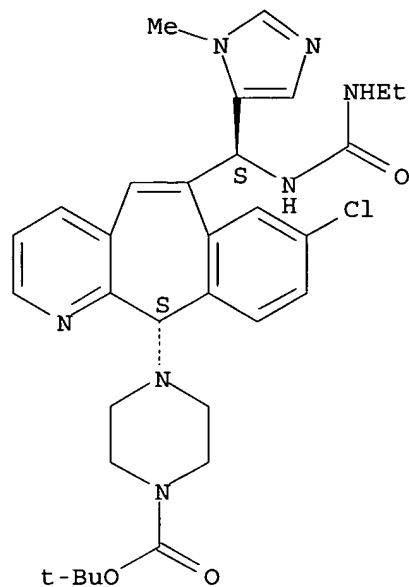
Absolute stereochemistry.



RN 592553-87-2 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(S)-  
 [[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-  
 benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1,1-dimethylethyl ester (9CI)  
 (CA INDEX NAME)

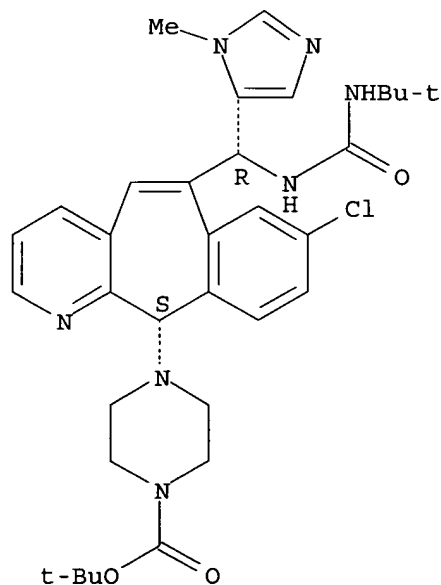
Absolute stereochemistry.



RN 592553-92-9 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1,1-dimethylethyl ester, stereoisomer (9CI) (CA INDEX NAME)

Absolute stereochemistry.

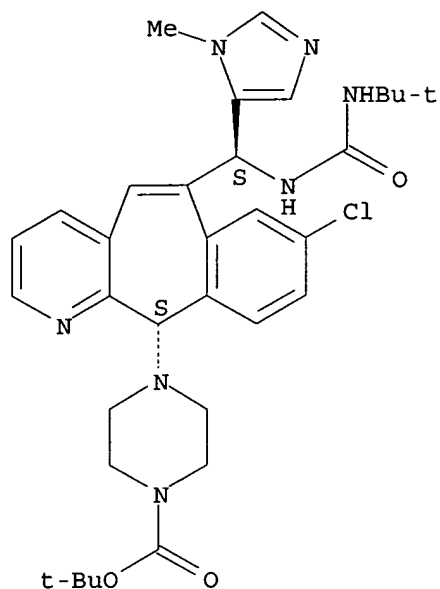


RN 592553-93-0 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(S)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-

benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1,1-dimethylethyl ester (9CI)  
(CA INDEX NAME)

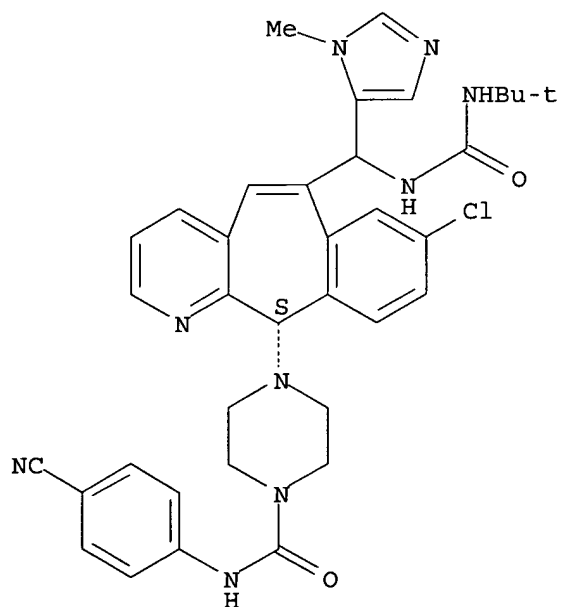
Absolute stereochemistry.



RN 592553-98-5 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-cyanophenyl)- (9CI) (CA INDEX NAME)

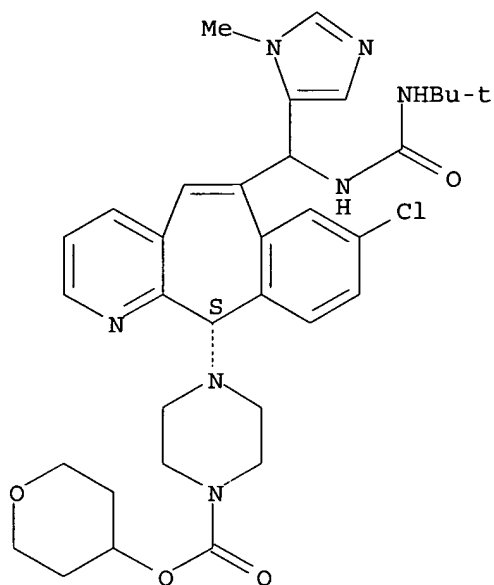
Absolute stereochemistry.



RN 592554-00-2 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, tetrahydro-2H-pyran-4-yl ester (9CI) (CA INDEX NAME)

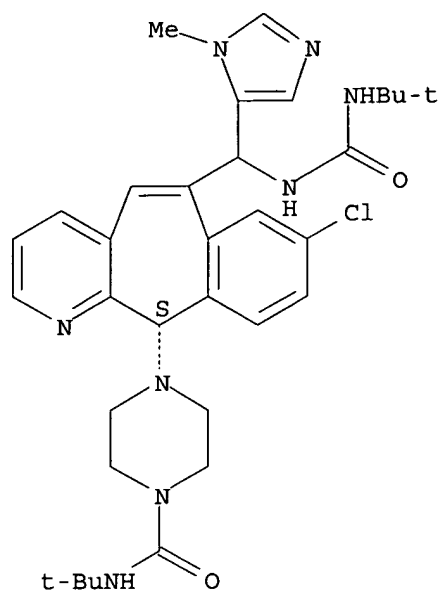
Absolute stereochemistry.



RN 592554-01-3 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)

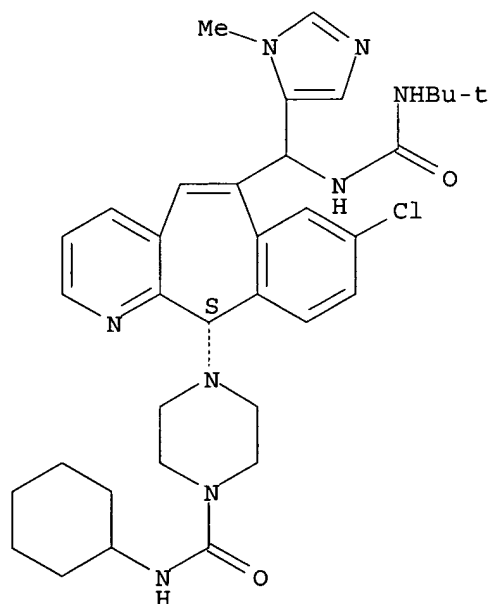
Absolute stereochemistry.



RN 592554-02-4 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-cyclohexyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

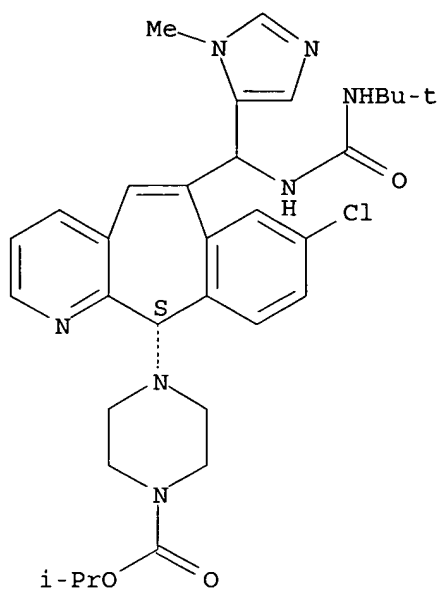


RN 592554-03-5 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1-methylethyl ester (9CI) (CA INDEX NAME)

INDEX NAME)

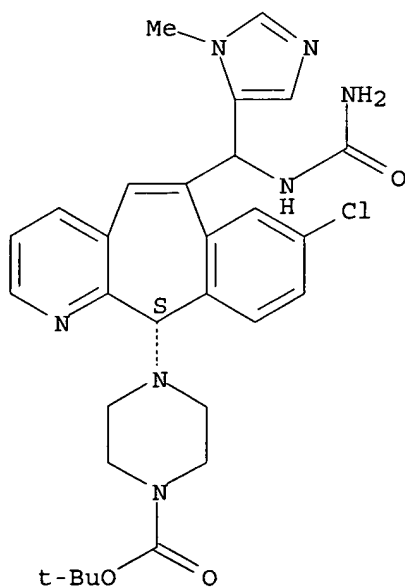
Absolute stereochemistry.



RN 592554-34-2 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-6-[[[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



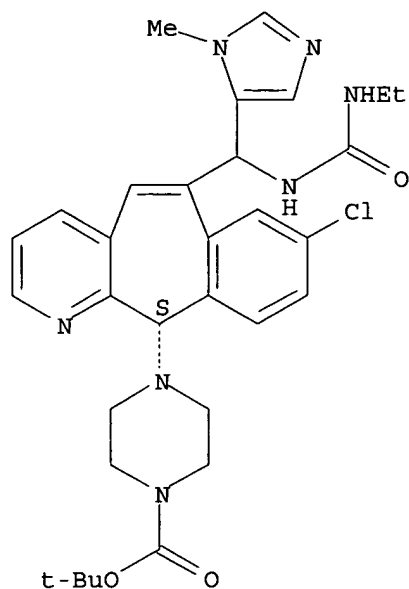
RN 592554-35-3 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl)-, 1,1-dimethylethyl ester (9CI)  
(CA INDEX NAME)

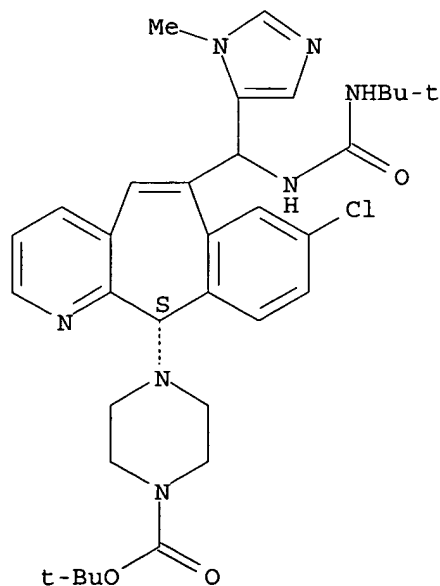
Absolute stereochemistry.



RN 592554-38-6 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl)-, 1,1-dimethylethyl ester (9CI)  
(CA INDEX NAME)

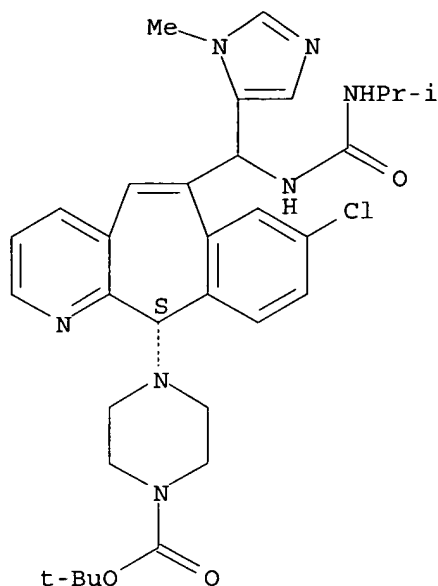
Absolute stereochemistry.



RN 592554-74-0 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(1*S*)-8-chloro-6-[[[(1-methylethyl)amino]carbonyl]amino](1-methyl-1*H*-imidazol-5-yl)methyl]-11*H*-benzo[5,6]cyclohepta[1,2-*b*]pyridin-11-yl]-, 1,1-dimethylethyl ester (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.



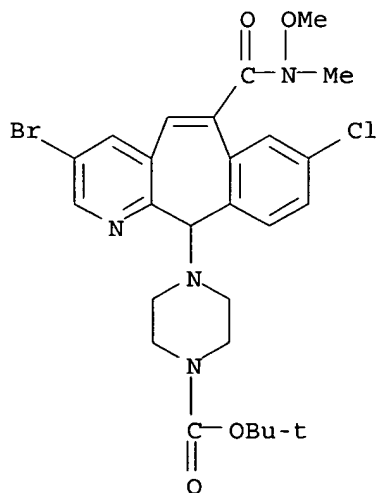
IT 592554-89-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of piperazinybenzocycloheptapyridines and related compds. as farnesyl protein transferase inhibitors useful as antitumor agents)

RN 592554-89-7 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[3-bromo-8-chloro-6-[(methoxymethylamino)carbonyl]-11*H*-benzo[5,6]cyclohepta[1,2-*b*]pyridin-11-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 8 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:633456 HCAPLUS

DOCUMENT NUMBER: 139:154954

TITLE: Medicinal compositions containing gabapentin or pregabalin and N-type calcium channel antagonist

INVENTOR(S): Iwayama, Satoshi; Koganei, Hajime; Fujita, Shinichi; Takeda, Tomoko; Yamamoto, Hiroshi; Niwa, Seiji

PATENT ASSIGNEE(S): Ajinomoto Co., Inc., Japan

SOURCE: PCT Int. Appl., 154 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003066040	A1	20030814	WO 2003-JP1163	20030205
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2003207219	A1	20030902	AU 2003-207219	20030205
EP 1481673	A1	20041201	EP 2003-703174	20030205
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
US 2005009814	A1	20050113	US 2004-911633	20040805
PRIORITY APPLN. INFO.:			JP 2002-28208	A 20020205
			JP 2002-111068	A 20020412
			JP 2002-317480	A 20021031
			WO 2003-JP1163	W 20030205

OTHER SOURCE(S): MARPAT 139:154954

AB Disclosed are medicinal compns. useful as preventives/remedies for pain which comprise gabapentin, pregabalin or pharmaceutically acceptable salts thereof combined with N-type calcium channel antagonists or pharmaceutically acceptable salts thereof having specified structures. A compound N-[3-[4-(5H-dibenzo[a,d][7]annulene-5-ylidene)-1-piperidinyl]-3-oxopropyl]-2,2-dimethylpropanamide (I) was prepared. The analgesic effect of oral administration of gabapentin 100 mg/kg combined with the compound I 3 mg/kg in pain rat model was examined.

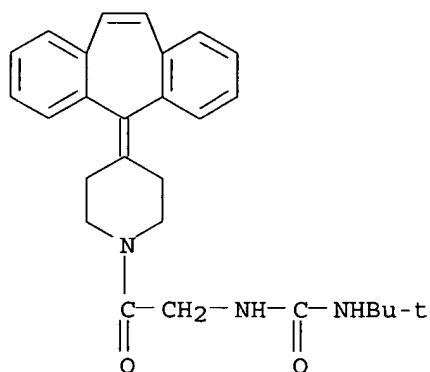
IT 500894-75-7P 500894-93-9P 572923-86-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

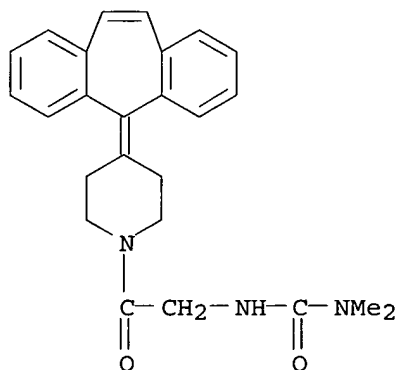
(medicinal compns. containing gabapentin or pregabalin and N-type calcium channel antagonist)

RN 500894-75-7 HCAPLUS

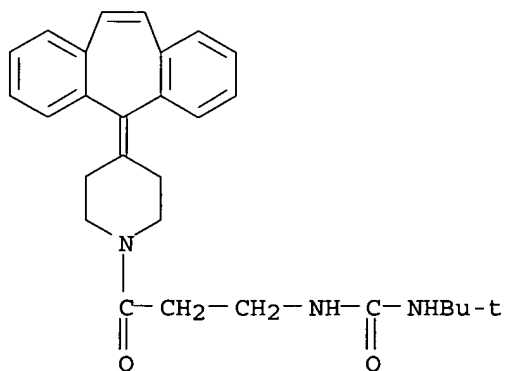
CN Piperidine, 4-(5H-dibenzo[a,d]cyclohepten-5-ylidene)-1-[[[(1,1-dimethylethyl)amino]carbonyl]amino]acetyl]- (9CI) (CA INDEX NAME)



RN 500894-93-9 HCAPLUS  
 CN Piperidine, 4-(5H-dibenzo[a,d]cyclohepten-5-ylidene)-1-  
 [[[(dimethylamino)carbonyl]amino]acetyl]- (9CI) (CA INDEX NAME)



RN 572923-86-5 HCAPLUS  
 CN Piperidine, 4-(5H-dibenzo[a,d]cyclohepten-5-ylidene)-1-[3-[[[(1,1-dimethylethyl)amino]carbonyl]amino]-1-oxopropyl]- (9CI) (CA INDEX NAME)

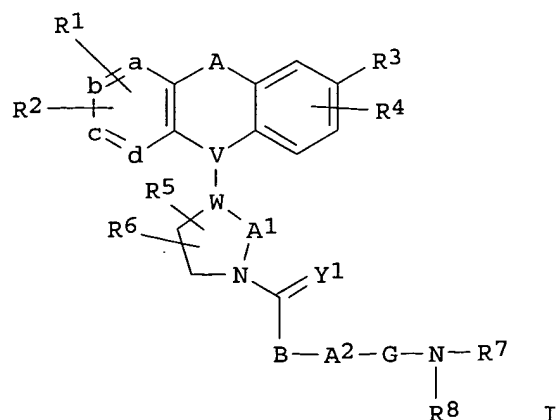


REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 9 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:173572 HCAPLUS  
 DOCUMENT NUMBER: 138:221602  
 TITLE: Preparation of diarylalkene and diarylalkane derivatives as N-type calcium channel antagonists  
 INVENTOR(S): Yamamoto, Takashi; Niwa, Seiji; Otani, Kayo; Ohno, Seiji; Koganei, Hajime; Iwayama, Satoshi; Takahara, Akira; Ono, Yukitsugu; Takeda, Tomoko; Fujita, Shinichi; Moki, Keiko  
 PATENT ASSIGNEE(S): Ajinomoto Co., Inc., Japan; et al.  
 SOURCE: PCT Int. Appl., 158 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2003018538	A1	20030306	WO 2002-JP8809	20020830
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2004167118	A1	20040826	US 2004-787175	20040227
PRIORITY APPLN. INFO.:			JP 2001-263718	A 20010831
			JP 2002-14387	A 20020123
			JP 2002-111067	A 20020412
			WO 2002-JP8809	A1 20020830
OTHER SOURCE(S):			MARPAT 138:221602	
GI				



AB The title compds. I [A represents CH:CH, etc.; a, b, c, and d each

represents CH, etc.; R1, R2, R3, R4, R5, and R6 each represents hydrogen, etc.; V-W represents C:C, etc.; A1 is (CH<sub>2</sub>)<sub>n</sub>; n is 0 to 3; Y1 represents oxygen, etc.; B represents (CH<sub>2</sub>)<sub>v</sub>CHR<sub>21</sub> (v is 0 to 3 and R<sub>21</sub> represents hydrogen, lower alkyl, etc.), etc.; G represents CO, a covalent bond, etc.; A2 is (CH<sub>2</sub>)<sub>m</sub>; m is 0 to 6; and R7 and R8 each represents hydrogen, lower alkyl, COR<sub>18a</sub>, COOR<sub>20</sub> (R<sub>18a</sub> and R<sub>20</sub> each represents lower alkyl, etc.), etc.] are prepared I are selective N-type calcium channel antagonists. In an in vitro test, compds. of this invention at 10 μM gave 67% to 85% antagonism of N-type calcium channel.

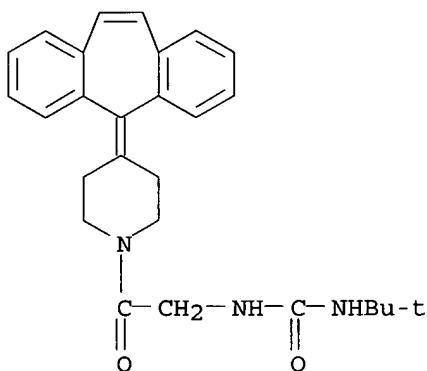
IT 500894-75-7P 500894-93-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of diarylalkene and diarylalkane derivs. as N-type calcium channel inhibitors)

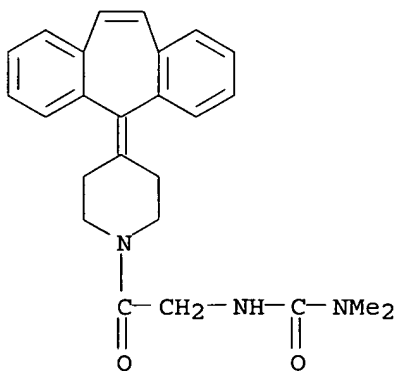
RN 500894-75-7 HCAPLUS

CN Piperidine, 4-(5H-dibenzo[a,d]cyclohepten-5-ylidene)-1-[[[(1,1-dimethylethyl)amino]carbonyl]amino]acetyl]- (9CI) (CA INDEX NAME)



RN 500894-93-9 HCAPLUS

CN Piperidine, 4-(5H-dibenzo[a,d]cyclohepten-5-ylidene)-1-[[[(dimethylamino)carbonyl]amino]acetyl]- (9CI) (CA INDEX NAME)

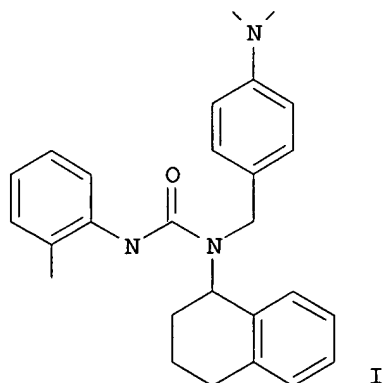


REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 10 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2003:76556 HCAPLUS

DOCUMENT NUMBER: 138:131125  
 TITLE: Fat accumulation-modulating compounds  
 INVENTOR(S): Stevenson, Michael John; Leighton, Harry Jefferson  
 PATENT ASSIGNEE(S): Adipogenix, Inc., USA  
 SOURCE: PCT Int. Appl., 96 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003007888	A2	20030130	WO 2002-US23295	20020722
WO 2003007888	A3	20031127		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2003144350	A1	20030731	US 2002-201588	20020722
PRIORITY APPLN. INFO.:			US 2001-306837P	P 20010720
OTHER SOURCE(S):	MARPAT 138:131125			
GI				



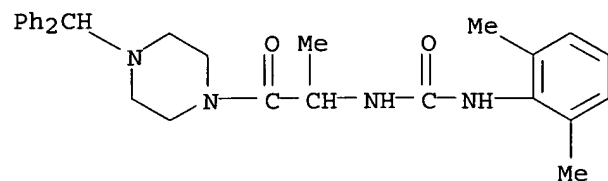
AB The present invention pertains to compds. effective at modulating fatty acid or triglyceride ("fat") accumulation by cells, such compds. having therapeutic potential as regulators of body mass and for the treatment of overweight individuals, obesity, and metabolic disorders. An example compound is I and protocol for high-throughput screening of compound efficacy on human preadipocytes is given. Therapeutic methods and pharmaceutical compns. featuring these compds. are also provided.

IT 292627-89-5 491868-37-2 491868-38-3  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(fat accumulation-modulating compds.)

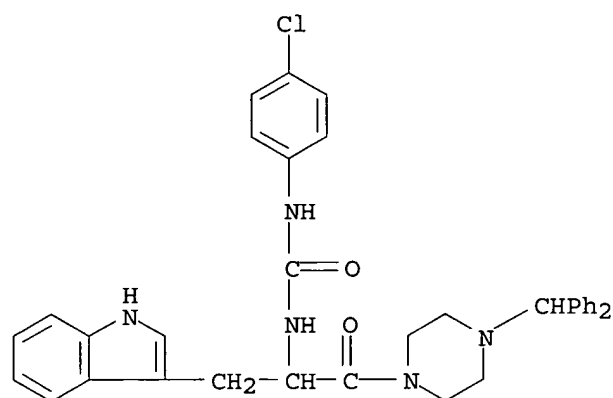
RN 292627-89-5 HCAPLUS

CN Piperazine, 1-[2-[[[(2,6-dimethylphenyl)amino]carbonyl]amino]-1-oxopropyl]-4-(diphenylmethyl)- (9CI) (CA INDEX NAME)



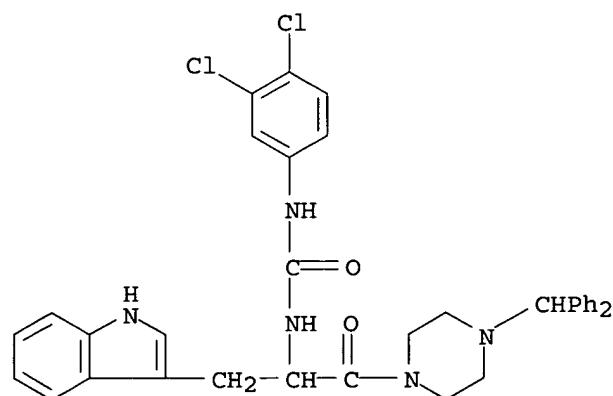
RN 491868-37-2 HCAPLUS

CN Piperazine, 1-[2-[[[(4-chlorophenyl)amino]carbonyl]amino]-3-(1H-indol-3-yl)-1-oxopropyl]-4-(diphenylmethyl)- (9CI) (CA INDEX NAME)



RN 491868-38-3 HCAPLUS

CN Piperazine, 1-[2-[[[(3,4-dichlorophenyl)amino]carbonyl]amino]-3-(1H-indol-3-yl)-1-oxopropyl]-4-(diphenylmethyl)- (9CI) (CA INDEX NAME)



L12 ANSWER 11 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:489403 HCAPLUS

DOCUMENT NUMBER: 135:92659



TITLE: Preparation of carboxamide diazepin derivatives and their inhibition of cathepsin K, cathepsin B, and papain

INVENTOR(S): Bhatnagar, Neerja; Mauger, Jacques

PATENT ASSIGNEE(S): Aventis Pharma S.A., Fr.

SOURCE: PCT Int. Appl., 231 pp.  
CODEN: PIXXD2

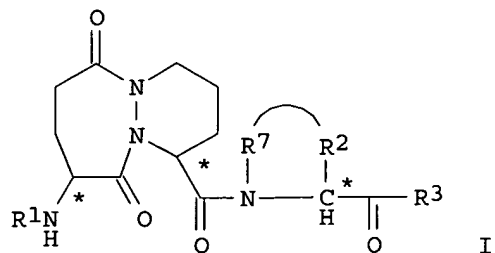
DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001047930	A1	20010705	WO 2000-FR3622	20001221
W: AE, AG, AL, AU, BA, BB, BG, BR, BZ, CA, CN, CR, CU, CZ, DM, DZ, EE, GD, GE, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MA, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TT, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
FR 2802927	A1	20010629	FR 1999-16567	19991228
FR 2802927	B1	20020301		
CA 2395275	AA	20010705	CA 2000-2395275	20001221
EP 1246824	A1	20021009	EP 2000-990087	20001221
EP 1246824	B1	20040609		
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BR 2000016845	A	20021015	BR 2000-16845	20001221
JP 2003519152	T2	20030617	JP 2001-549400	20001221
EE 200200362	A	20030815	EE 2002-362	20001221
AT 268775	E	20040615	AT 2000-990087	20001221
PT 1246824	T	20041029	PT 2000-990087	20001221
ES 2218275	T3	20041116	ES 2000-990087	20001221
AU 780522	B2	20050324	AU 2001-26888	20001221
NZ 519884	A	20050324	NZ 2000-519884	20001221
NO 2002003107	A	20020827	NO 2002-3107	20020627
ZA 2002005221	A	20030904	ZA 2002-5221	20020628
US 2003100550	A1	20030529	US 2002-168116	20020708
PRIORITY APPLN. INFO.:			FR 1999-16567	A 19991228
			WO 2000-FR3622	W 20001221
OTHER SOURCE(S):	MARPAT 135:92659			
GI				



AB The title compds. I [R1 = C(O), R5, SO2R5, C(O)NR6R5; R2 and R7 are such that either R7 represents a hydrogen atom and R2 is such that the group

(a) represents the radical of a natural or nonnatural amino acid, or R2 and R7 form together a cycle with the nitrogen and carbon atom whereto they are bound; R3 = CH:N2 or CH2LR4, R4 represents in particular a linear or branched alkyl radical], inhibitors of cathepsin K, cathepsin B, and papain, were prepared E.g., 3-[9(S)-benzoylamino-6,10-dioxo-1,2,3,4,7,8,9,10-octahydro-6H-pyridazino[1,2-a][1,2]diazepine-1(S)-carboxamide]-5-methyl-1-benzoyloxyhexane-2-one was prepared

IT 348102-13-6P

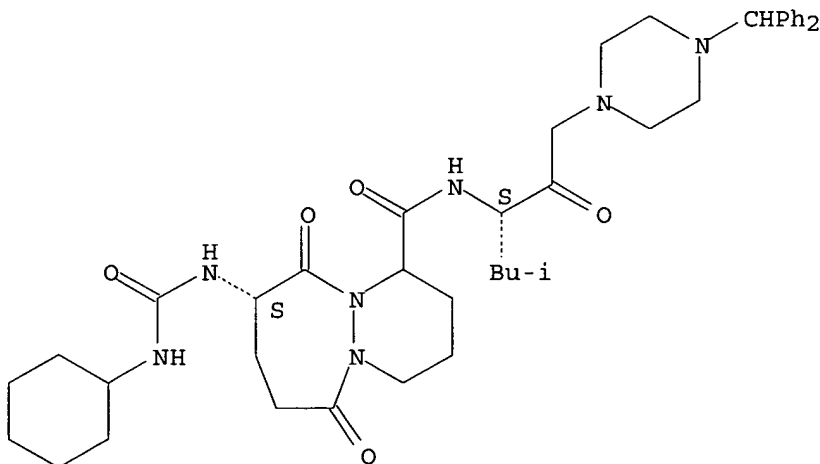
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of carboxamide diazepin derivs. and their inhibition of cathepsin K, cathepsin B, and papain)

RN 348102-13-6 HCAPLUS

CN 6H-Pyridazino[1,2-a][1,2]diazepine-1-carboxamide, 9-[[[(cyclohexylamino)carbonyl]amino]-N-[(1S)-1-[[4-(diphenylmethyl)-1-piperazinyl]acetyl]-3-methylbutyl]octahydro-6,10-dioxo-, (9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 12 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:115118 HCAPLUS

DOCUMENT NUMBER: 134:163065

TITLE: Preparation of hydroxamic acid and N-formyl hydroxylamine derivatives as antibacterial agents  
INVENTOR(S): Pratt, Lisa Marie; Keavey, Kenneth Noel; Pain, Gilles Denis; Mounier, Laurent Franck

PATENT ASSIGNEE(S): British Biotech Pharmaceuticals Limited, UK

SOURCE: PCT Int. Appl., 101 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2001010834	A2	20010215	WO 2000-GB3078	20000810
WO 2001010834	A3	20010628		
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RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2379061	AA	20010215	CA 2000-2379061	20000810
EP 1202968	A2	20020508	EP 2000-949820	20000810
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BR 2000013112	A	20020611	BR 2000-13112	20000810
TR 200200360	T2	20020621	TR 2002-200200360	20000810
JP 2003506438	T2	20030218	JP 2001-515301	20000810
AU 766881	B2	20031023	AU 2000-63080	20000810
NZ 517239	A	20040924	NZ 2000-517239	20000810
ZA 2002001093	A	20030507	ZA 2002-1093	20020207
NO 2002000621	A	20020409	NO 2002-621	20020208
US 6846825	B1	20050125	US 2002-49131	20020710
US 2005065095	A1	20050324	US 2004-953788	20040930
PRIORITY APPLN. INFO.:			GB 1999-18869	A 19990810
			GB 1999-27093	A 19991116
			WO 2000-GB3078	W 20000810
			US 2002-49131	A3 20020710

## OTHER SOURCE(S): MARPAT 134:163065

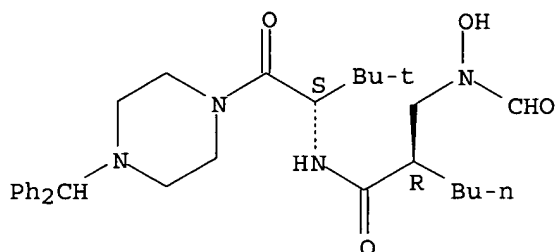
AB Selected compds. QCH(R1)CH(R2)C(O)A (I) and pharmaceutical and veterinary compns. comprising such compds. are antibacterial agents with respect to a range of Gram-pos. and Gram-neg. organisms. In I, Q = -N(OH)C(O)H or -C(O)NH(OH); R1 = H, C1-C6 alkyl or C1-C6 alkyl substituted by  $\geq$  halogen atoms, or, except when Q is -N(OH)C(O)H, hydroxy, C1-C6 alkoxy, C1-C6 alkenyloxy, amino, C1-C6 alkylamino, or di-(C1-C6 alkyl)amino; R2 = substituted or unsubstituted C1-C6 alkyl, cycloalkyl(C1-C6 alkyl)- or aryl(C1-C6 alkyl)-; and A = -NHCHR4C(O)NR5R6 or -NR5R6, wherein R4 = side chain of a natural or non-natural  $\alpha$ -amino acid, and R5 and R6 when taken together with the N atom to which they are attached form a saturated heterocyclic 1st ring of 5 to 7 atoms (piperidine and piperazine in the examples). In general, the compds. of the examples are more active against the Gram pos. S. capitis than the Gram neg. E. coli. Test results are also reported for 2R-cyclopentylmethyl-3-(formylhydroxyamino)-N-(1S-{4-[4-(4-hydroxypiperidine-1-carbonyl)phenoxy]piperidine-1-carbonyl}-2,2-dimethylpropyl)propionamide against certain respiratory tract pathogens. Although the methods of preparation are not claimed, .apprx.95 example preps. are included.

IT **325795-44-6P**, 2R-[(Formylhydroxyamino)methyl]hexanoic acid  
 [1S-(4-benzhydrylpiperazine-1-carbonyl)-2,2-dimethylpropyl]amide  
**325795-58-2P**, N-[2R-(4-Benzhydrylpiperazine-1-carbonyl)hexyl]-N-hydroxyformamide **325795-62-8P**, N-(2R-{4-[(4-Chlorophenyl)phenylmethyl]piperazine-1-carbonyl}hexyl)-N-hydroxyformamide  
**325795-74-2P**, N-(2R-{4-[Bis(4-fluorophenyl)methyl]piperazine-1-carbonyl}hexyl)-N-hydroxyformamide  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of hydroxamic acid and N-formyl hydroxylamine derivs. as antibacterial agents)

RN 325795-44-6 HCAPLUS

CN Hexanamide, N-[(1S)-1-[[4-(diphenylmethyl)-1-piperazinyl]carbonyl]-2,2-dimethylpropyl]-2-[(formylhydroxyamino)methyl]-, (2R)- (9CI) (CA INDEX NAME)

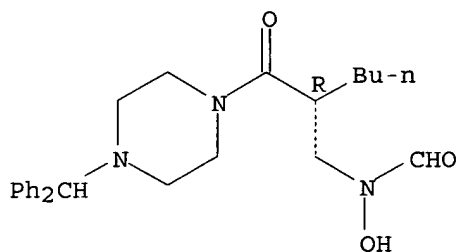
Absolute stereochemistry.



RN 325795-58-2 HCAPLUS

CN Piperazine, 1-(diphenylmethyl)-4-[(2R)-2-[(formylhydroxyamino)methyl]-1-oxohexyl]- (9CI) (CA INDEX NAME)

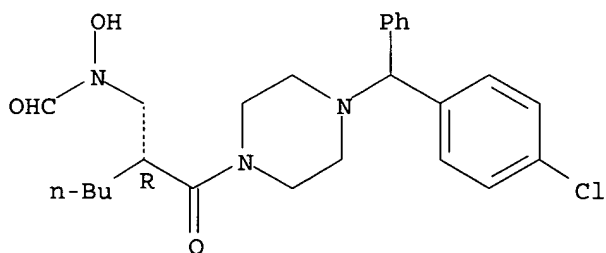
Absolute stereochemistry.



RN 325795-62-8 HCAPLUS

CN Piperazine, 1-[(4-chlorophenyl)phenylmethyl]-4-[(2R)-2-[(formylhydroxyamino)methyl]-1-oxohexyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



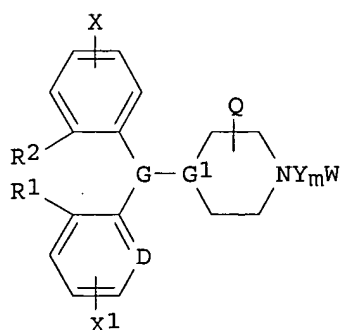
RN 325795-74-2 HCAPLUS

CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[(2R)-2-[(formylhydroxyamino)methyl]-1-oxohexyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

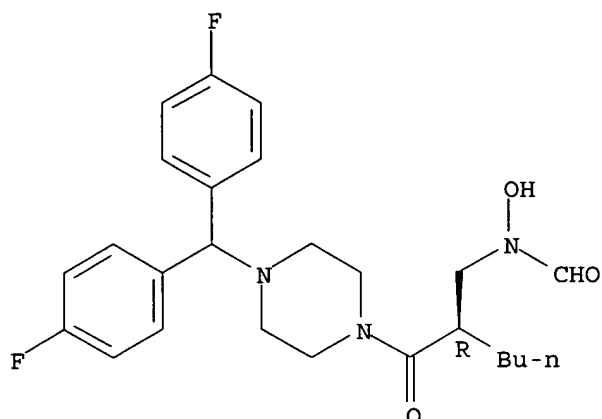
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EP 1418173	A1	20040512	EP 2004-3260	20000323
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CN 1528742	A	20040915	CN 2004-10028226	20000323
AT 279401	E	20041015	AT 2000-912274	20000323
EE 200400104	A	20041015	EE 2004-104	20000323
RU 2241707	C2	20041210	RU 2001-129098	20000323
TR 200401779	T2	20050124	TR 2004-200401779	20000323
ES 2231164	T3	20050516	ES 2000-912274	20000323
US 6894059	B1	20050517	US 2001-937667	20000323
US 6451801	B1	20020917	US 2000-534947	20000324
ZA 2001007642	A	20020917	ZA 2001-7642	20010917
BG 105909	A	20020531	BG 2001-105909	20010918
NO 2001004648	A	20011122	NO 2001-4648	20010925
HK 1041880	A1	20050218	HK 2002-103566	20020511
US 2003220347	A1	20031127	US 2002-242346	20020912
US 6797713	B2	20040928		
US 6686502	B1	20040203	US 2003-386226	20030311
US 2004048875	A1	20040311	US 2003-637163	20030808
NO 2004002861	A	20011122	NO 2004-2861	20040706
JP 2005002118	A2	20050106	JP 2004-204939	20040712
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			CA 2000-2368090	A3 20000323
			EP 2000-912274	A3 20000323
			JP 2000-607998	A3 20000323
			WO 2000-BE26	W 20000323
			US 2000-534947	A1 20000324
			US 2002-242346	A1 20020912

OTHER SOURCE(S): MARPAT 133:281798  
GI



I

AB Title compds. [I; X, X1 = H, halo, alkyl, alkenyl, alkynyl, alkoxy, CF<sub>3</sub>, etc.; GG1 = CHN, CHCH, C:C; D = CH, N; R1, R2 = H; R1R2 = (CH<sub>2</sub>)<sub>n</sub>; n = 0-3; m = 0, 1; Y = L1, L2VZtL3; t = 0, 1; L1 = (heteroatom-interrupted) alkylene, alkenylene, alkynylene; L2 = L1, bond, L4Q1, etc.; L3, L4 = L1, bond; V = divalent arene, heteroarene, divalent saturated heterocycle; Z = AlNOM1CONR10R11, etc.; Q, Q1 = H, ACO2R6, ACONR6R7; W = N(OM)CONR8R9, NR8CON(OM)R9, etc.; A, A1 = bond, alkylene, alkenylene, alkynylene, etc.; R6-R11 = H, (heteroatom-interrupted) alkyl, alkenyl, alkynyl, aryl, etc.; M, M1 = H, pharmaceutically acceptable cation, metabolically cleavable group; with provisos], were prepared Thus, (R)-(4-



L12 ANSWER 13 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:707152 HCAPLUS

DOCUMENT NUMBER: 133:281798

TITLE: Preparation of diphenylmethylpiperazinyldihydroxyureas and related compounds for treatment of asthma, allergy and inflammation.

INVENTOR(S): Scannel, Ralph; Chatelain, Pierre; Toy-Palmer, Anna; Differding, Edmond; Ellis, James; Lassoie, Marie-Agnes; Young, Michelle; Cai, Xiong; Hussoin, Sajjat; Grewal, Gurmit; Lewis, Timothy

PATENT ASSIGNEE(S): UCB, S.A., Belg.

SOURCE: PCT Int. Appl., 64 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000058295	A2	20001005	WO 2000-BE26	20000323
WO 2000058295	A3	20010208		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW			
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CA 2368090	AA	20001005	CA 2000-2368090	20000323
CA 2471984	AA	20001005	CA 2000-2471984	20000323
EP 1165533	A2	20020102	EP 2000-912274	20000323
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JP 2002540198	T2	20021126	JP 2000-607998	20000323
EE 200100498	A	20021216	EE 2001-498	20000323
AU 761422	B2	20030605	AU 2000-34105	20000323

chlorophenyl)phenylmethyl]piperazine, 4-(2-bromoethoxy)benzyl alc. (preparation given), and Et3N were stirred in CH2Cl2 at 50° to give 94.1% 4-[2-[4-[(1R)-(4-chlorophenyl)phenylmethyl]piperazinyl]ethoxy]benzyl alc. This was stirred with PhO2CNHOCO2Ph, Ph3P, and diisopropylazodicarboxylate in THF at 0° to room temperature to give 78.4% N-[[4-[2-[4-[(1R)-(4-chlorophenyl)phenylmethyl]piperazinyl]ethoxy]phenyl]methyl]phenoxycarbonyl aminophenoxyformate. The latter was stirred with NH3 in MeOH to give 73.2% N-[[4-[2-[4-[(1R)-(4-chlorophenyl)phenylmethyl]piperazinyl]ethoxy]phenyl]methyl]amino-N-hydroxyamide. This bound to human H1 receptors with Ki = 24 nM.

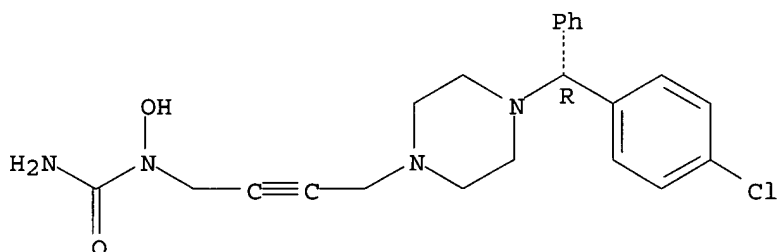
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299460-40-5P 299460-41-6P 299460-43-8P  
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299460-47-2P 299460-50-7P 299460-54-1P  
299460-56-3P 299460-65-4P 299460-74-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of diphenylmethylpiperazinylhydroxyureas and related compds. for treatment of asthma, allergy and inflammation)

RN 299460-30-3 HCAPLUS

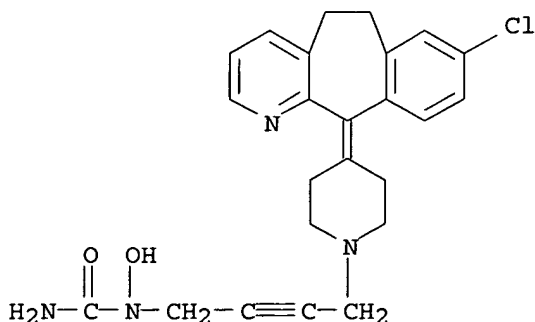
CN Urea, N-[4-[4-[(R)-(4-chlorophenyl)phenylmethyl]-1-piperazinyl]-2-butynyl]-N-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



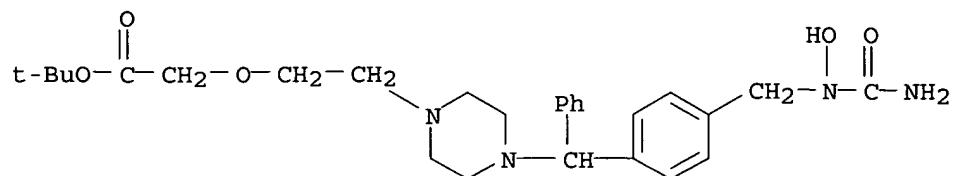
RN 299460-31-4 HCAPLUS

CN Urea, N-[4-[4-(8-chloro-5,6-dihydro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-ylidene)-1-piperidinyll]-2-butynyl]-N-hydroxy- (9CI) (CA INDEX NAME)



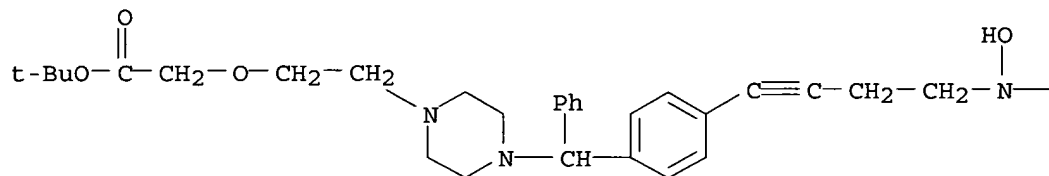
RN 299460-39-2 HCAPLUS

CN Acetic acid, [2-[4-[[4-[(aminocarbonyl)hydroxyamino]methyl]phenyl]phenylmethyl]-1-piperazinyl]ethoxy-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

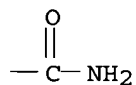


RN 299460-40-5 HCAPLUS  
 CN Acetic acid, [2-[4-[[4-[(aminocarbonyl)hydroxyamino]-1-butynyl]phenyl]phenylmethyl]-1-piperazinyl]ethoxy-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

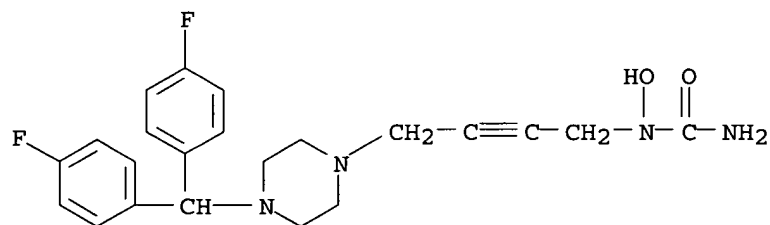
PAGE 1-A



PAGE 1-B

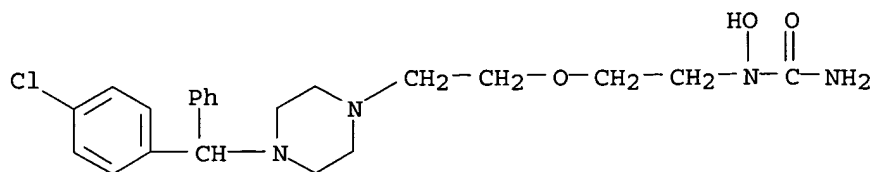


RN 299460-41-6 HCAPLUS  
 CN Urea, N-[4-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]-2-butynyl]-N-hydroxy- (9CI) (CA INDEX NAME)



RN 299460-43-8 HCAPLUS  
 CN Urea, N-[2-[2-[4-[(4-chlorophenyl)phenylmethyl]-1-piperazinyl]ethoxy]ethyl]-N-hydroxy- (9CI) (CA INDEX NAME)

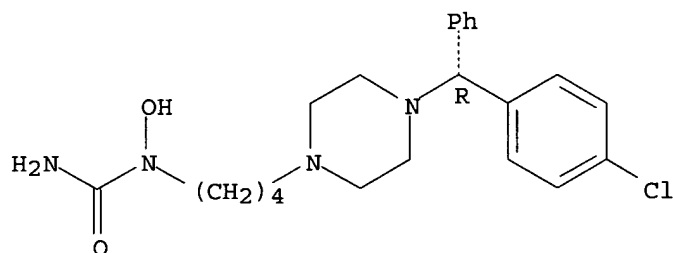




RN 299460-44-9 HCAPLUS

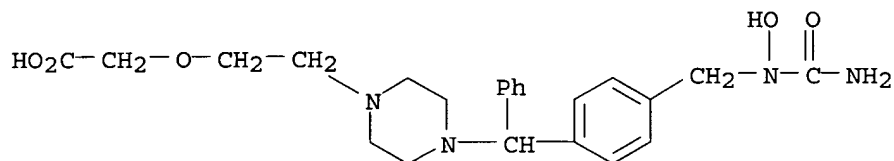
CN Urea, N-[4-[4-[(R)-(4-chlorophenyl)phenylmethyl]-1-piperazinyl]butyl]-N-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 299460-45-0 HCAPLUS

CN Acetic acid, [2-[4-[4-[[(aminocarbonyl)hydroxyamino]methyl]phenyl]phenylmethyl]-1-piperazinyl]ethoxy]-, dihydrochloride (9CI) (CA INDEX NAME)

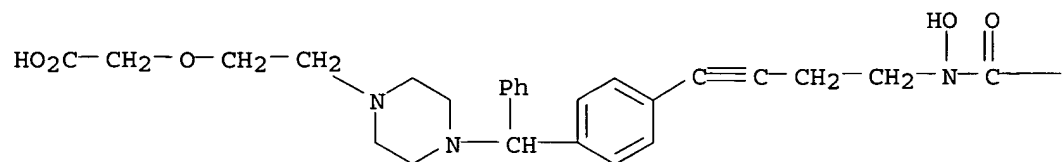


● 2 HCl

RN 299460-46-1 HCAPLUS

CN Acetic acid, [2-[4-[4-[4-[[(aminocarbonyl)hydroxyamino]-1-butynyl]phenyl]phenylmethyl]-1-piperazinyl]ethoxy]-, dihydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A



●2 HCl

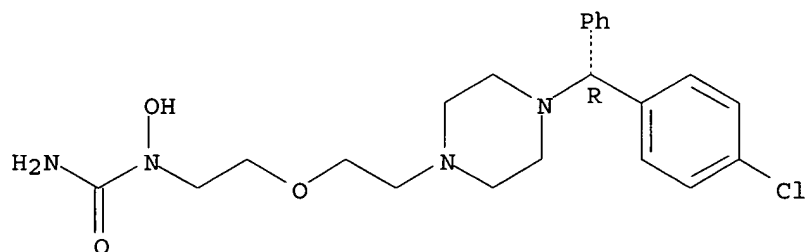
PAGE 1-B

— NH<sub>2</sub>

RN 299460-47-2 HCAPLUS

CN Urea, N-[2-[2-[4-[(R)-(4-chlorophenyl)phenylmethyl]-1-piperazinyl]ethoxy]ethyl]-N-hydroxy- (9CI) (CA INDEX NAME)

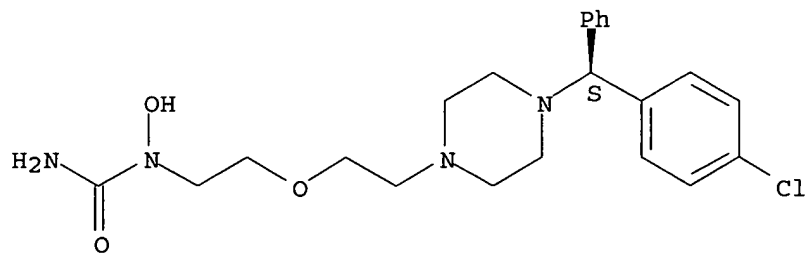
Absolute stereochemistry.



RN 299460-50-7 HCAPLUS

CN Urea, N-[2-[2-[4-[(S)-(4-chlorophenyl)phenylmethyl]-1-piperazinyl]ethoxy]ethyl]-N-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

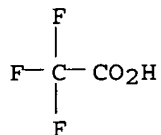


RN 299460-54-1 HCAPLUS

CN Acetic acid, [2-[4-[[4-[4-[(aminocarbonyl)hydroxyamino]-1-butynyl]phenyl]phenylmethyl]-1-piperazinyl]ethoxy]-, bis(trifluoroacetate)



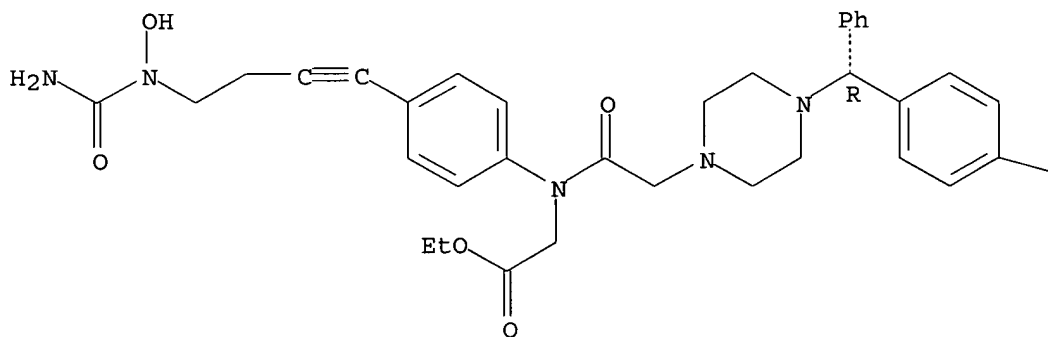
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RN 299460-65-4 HCAPLUS  
CN Glycine, N-[4-[4-[(aminocarbonyl)hydroxyamino]-1-butynyl]phenyl]-N-[[4-[(R)-(4-chlorophenyl)phenylmethyl]-1-piperazinyl]acetyl]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

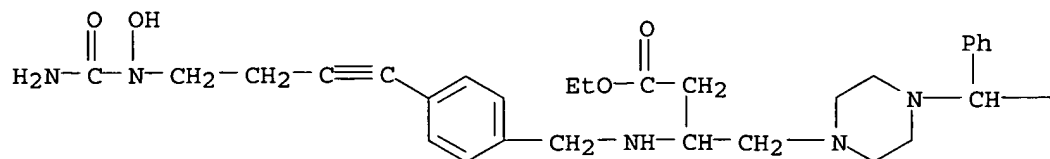


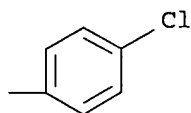
PAGE 1-B

Cl

RN 299460-74-5 HCAPLUS  
CN 1-Piperazinebutanoic acid, β-[[[4-[4-[(aminocarbonyl)hydroxyamino]-1-butynyl]phenyl]methyl]amino]-4-[(4-chlorophenyl)phenylmethyl]-, ethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A





L12 ANSWER 14 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2000:706352 HCAPLUS  
 DOCUMENT NUMBER: 133:276324  
 TITLE: Inhibitors of cellular nicotinamide mononucleotide formation, therapeutic use thereof, and identification and metabolic methods  
 INVENTOR(S): Biedermann, Elfi; Eisenburger, Rolf; Hasmann, Max; Loser, Roland; Rattel, Benno; Reiter, Friedemann; Schein, Barbara; Schemainda, Isabel; Schulz, Michael; Seibel, Klaus; Vogt, Klaus; Wosikowski, Katja  
 PATENT ASSIGNEE(S): Klinge Pharma G.m.b.H., Germany  
 SOURCE: Ger. Offen., 20 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19908483	A1	20001005	DE 1999-19908483	19990226

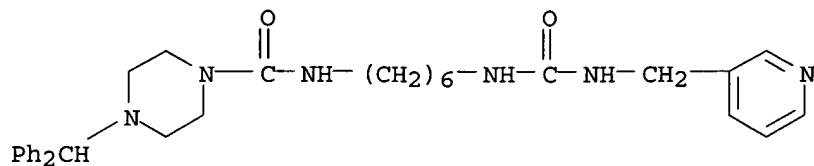
PRIORITY APPLN. INFO.: DE 1999-19908483 19990226

AB Biol. active substances are described which inhibit the cellular formation of NMN, an essential intermediate in NAD(P) biosynthesis in the cell. These substances can be used for a pharmaceutical composition for the treatment of cancer, leukemia, or for Immunosuppression. Addnl., methods are described for the identification of such substances and for the investigation of a given cell type for its dependence on nicotinamide as a precursor in NAD synthesis.

IT 299400-58-1  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (NMN formation inhibitors, therapeutic use thereof, and identification and metabolic methods)

RN 299400-58-1 HCAPLUS

CN 1-Piperazinecarboxamide, 4-(diphenylmethyl)-N-[6-[[[(3-pyridinylmethyl)amino]carbonyl]amino]hexyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 15 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:757952 HCAPLUS

DOCUMENT NUMBER: 132:117085

TITLE: Synthesis and SAR of Adatanserin: Novel Adamantyl Aryl- and Heteroarylpiperazines with Dual Serotonin 5-HT1A and 5-HT2 Activity as Potential Anxiolytic and Antidepressant Agents

AUTHOR(S): Abou-Gharbia, Magid A.; Childers, Wayne E., Jr.; Fletcher, Horace; McGaughey, Georgia; Patel, Usha; Webb, Michael B.; Yardley, John; Andree, Terrance; Boast, Carl; Kucharik, Robert J.; Marquis, Karen; Morris, Herman; Scerni, Rosemary; Moyer, John A.  
CORPORATE SOURCE: Chemical Sciences and CNS Disorders, Wyeth-Ayerst Research, Princeton, NJ, 08543-8000, USASOURCE: Journal of Medicinal Chemistry (1999), 42(25), 5077-5094

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 132:117085

AB Several novel functionalized adamantyl aryl- and heteroarylpiperazine derivs. were prepared and examined in various receptor binding and behavioral tests to determine their serotonin receptor activities. Many compds. demonstrated modest to high affinity for 5-HT1A receptors. 2-[4-(2-Pyrimidinyl)-1-piperazinyl]ethyl adamantyl-1-carboxylate demonstrated relatively high affinity for 5-HT1A receptors ( $K_i = 8$  nM) and acceptable selectivity vs. D2 receptors ( $K_i = 708$  nM); however, it lacked in vivo activity in serotonergic behavioral models. In contrast, WY-50,324 (SEB-324, adatanserin) (adamantyl-1-carboxylic acid 2-[4-(2-pyrimidinyl)-1-piperazinyl]ethylamide) (I) and adamantyl-1-carboxylic acid 2-[4-(2-methoxyphenyl)-1-piperazinyl]ethylamide demonstrated high affinity for 5-HT1A binding sites ( $K_i = 1$  nM for both) and moderate affinity for 5-HT2 receptors ( $K_i = 73$  and 75 nM, resp.). Both compds. also demonstrated partial 5-HT1A agonist activity in vivo in rat serotonin syndrome and 5-HT2 antagonist activity in quipazine- and DOI-induced head shake paradigms. The selective 5-HT1A partial agonist and 5-HT2 antagonist activity of I was accompanied by significant anxiolytic activity in an animal conflict model. On the basis of this profile, compound 9 entered development as a combined anxiolytic and antidepressant agent.

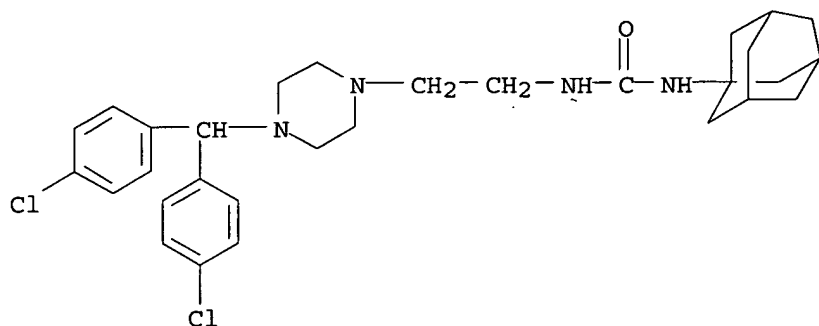
IT 256351-94-7P

RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)

(synthesis and SAR of adatanserin by preparation of novel adamantyl and aryl- and heteroarylpiperazines with dual serotonin 5-HT1A and 5-HT2 activity as potential anxiolytic and antidepressant agents)

RN 256351-94-7 HCAPLUS

CN Urea, N-[2-[4-[bis(4-chlorophenyl)methyl]-1-piperazinyl]ethyl]-N'-tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

REFERENCE COUNT: 85 THERE ARE 85 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 16 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:690954 HCAPLUS

DOCUMENT NUMBER: 131:307106

TITLE: Use of vitamin PP compounds as cytoprotective agents in chemotherapy

INVENTOR(S): Biedermann, Elfi; Hasmann, Max; Loser, Roland; Rattel, Benno; Reiter, Friedemann; Schein, Barbara; Schemainda, Isabel; Seibel, Klaus; Vogt, Klaus; Wosikowski, Katja

PATENT ASSIGNEE(S): Klinge Pharma GmbH, Germany

SOURCE: PCT Int. Appl., 145 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9953920	A1	19991028	WO 1999-EP2686	19990421
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
DE 19818044	A1	19991028	DE 1998-19818044	19980422
EP 1031564	A1	20000830	EP 1999-103814	19990226
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
AU 9939282	A1	19991108	AU 1999-39282	19990421
EP 1079832	A1	20010307	EP 1999-922119	19990421
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI			
JP 2002512190	T2	20020423	JP 2000-544324	19990421
AT 311186	E	20051215	AT 1999-922119	19990421
WO 2000050399	A1	20000831	WO 2000-EP1628	20000228

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,  
CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,  
IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,  
MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,  
SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW  
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,  
DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,  
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1154998 A1 20011121 EP 2000-907642 20000228  
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO  
JP 2002537380 T2 20021105 JP 2000-600982 20000228  
US 2002160968 A1 20021031 US 2001-935772 20010823  
US 6506572 B2 20030114

PRIORITY APPLN. INFO.:

DE 1998-19818044 A 19980422  
EP 1999-103814 A 19990226  
WO 1999-EP2686 W 19990421  
WO 2000-EP1628 W 20000228

OTHER SOURCE(S): MARPAT 131:307106

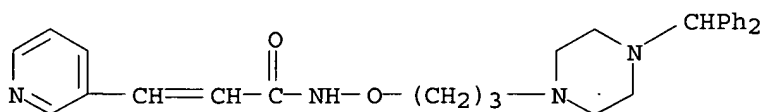
AB The invention relates to the use of vitamin PP compds. and/or compds. with anti-pellagra activity such as for example nicotinic acid (niacin), and nicotinamide (niacin-amide, vitamin PP, vitamin B3) for the reduction, elimination or prevention of side-effects of different degrees as well as for neutralization of acute side-effects in immunosuppressive or cancerostatic chemotherapy or diagnosis, especially with substituted pyridine carboxamides, as well as combination medicaments with an amount of compds. with vitamin B3 and/or anti-pellagra activity and chemotherapeutic agents are especially considered in the mentioned chemotherapies and indications. Nicotinamide at 500 mg/kg twice daily protected mice treated i.p. with antitumor N-[4-(1-diphenylmethylpiperidin-4-yl)butyl]-3-(pyridin-3-yl)propionamide. There were no deaths in the nicotinamide-treated mice and the strong reduction of leukocytes was completely prevented.

IT 227775-37-3

RL: ADV (Adverse effect, including toxicity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(vitamin PP compds. as cytoprotective agents in chemotherapy)

RN 227775-37-3 HCAPLUS

CN 2-Propenamide, N-[3-[4-(diphenylmethyl)-1-piperazinyl]propoxy]-3-(3-pyridinyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 17 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:404932 HCAPLUS

DOCUMENT NUMBER: 131:58849

TITLE: New piperazinyl-substituted pyridylalkane, -alkene, and -alkyne carboxamides, with antitumor and immunosuppressive activities

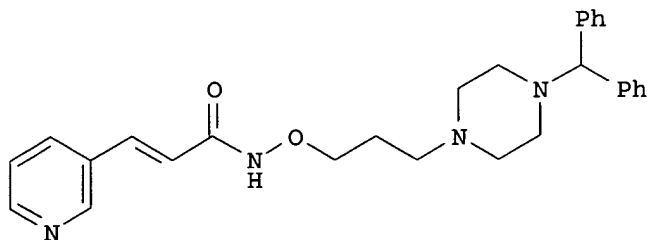
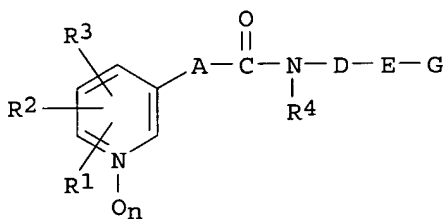
INVENTOR(S): Biedermann, Elfi; Hasmann, Max; Loser, Roland; Rattel, Benno; Reiter, Friedemann; Schein, Barbara; Seibel, Klaus; Vogt, Klaus; Wosikowski, Katja

PATENT ASSIGNEE(S): Klinge Pharma G.m.b.H., Germany



SOURCE: PCT Int. Appl., 224 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9931063	A1	19990624	WO 1998-EP8268	19981216
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
DE 19756236	A1	19990701	DE 1997-19756236	19971217
ZA 9811235	A	19990608	ZA 1998-11235	19981208
AU 9920543	A1	19990705	AU 1999-20543	19981216
EP 1060163	A1	20001220	EP 1998-965275	19981216
EP 1060163	B1	20051012		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002508356	T2	20020319	JP 2000-538990	19981216
AT 306473	E	20051015	AT 1998-965275	19981216
US 6903118	B1	20050607	US 2000-596001	20000616
PRIORITY APPLN. INFO.:			DE 1997-19756236	A 19971217
			WO 1998-EP8268	W 19981216
OTHER SOURCE(S):			MARPAT 131:58849	
GI				



AB The invention relates to new piperazinyl-substituted pyridylalkanoic, -alkenoic, and alkynoic acid amides with a saturated or (poly)unsatd.

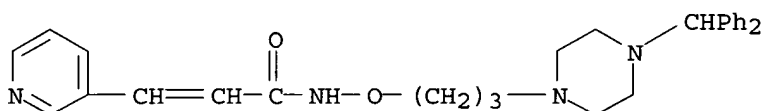
hydrocarbon residue in the carboxylic acid group, and analogs, i.e., having formula I [R1 = H, OH, halo, cyano, CONH2, CO2H, (hetero)aryl, alkoxy, amino, (hetero)aryloxy, etc.; R2 = H, halo, cyano, alkyl, CF3, OH, etc.; or R1R2 = (CH2)4, (CH:CH)2, or CH2OCH2O or its (di)alkyl derivs.; R3 = H, halo, alkyl, CF3, hydroxyalkyl, etc.; R4 = H, OH, alk(en/yn)yl, cycloalkyl, alkoxy, aralkoxy; n = 0, 1; A = (un)substituted alkylene or hetero-isosteres, cycloalkylene, alkenylene, alkadienylene, or ethynylene; D = (un)substituted alkylene, alkenylene, alkynylene, or hetero-isosteres of them; E = (un)substituted (bis) (homo)piperazine bound at the N atoms; G = variety of terminal chains]. Also disclosed are methods for the production of the compds., medicaments containing them, and their production, as well as their therapeutic use, especially as cytostatic agents and immunosuppressive agents, for example, in the treatment or prevention of various types of tumors, and control of immune reactions such as autoimmune diseases. For example, 3-(3-pyridyl)acrylic acid was activated with oxalyl chloride and condensed with O-[3-[4-(diphenylmethyl)piperazin-1-yl]propyl]hydroxylamine to give title compound II. Several representative compds. inhibited various human tumor cells in vitro at low concns., e.g., with IC50 values of 0.1 nM to 10 µM, and also showed immunosuppressive activity against mouse lymphocytes with IC50 values of 0.03-0.09 µM.

IT 227775-37-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(target compound; preparation of piperazinyl-substituted pyridylalkanecarboxamides and analogs as cytostatics and immunosuppressants)

RN 227775-37-3 HCAPLUS

CN 2-Propenamide, N-[3-[4-(diphenylmethyl)-1-piperazinyl]propoxy]-3-(3-pyridinyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 18 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:332965 HCAPLUS

DOCUMENT NUMBER: 131:44643

TITLE: Preparation of phenol derivatives as antioxidants and ACAT inhibitors

INVENTOR(S): Suzuki, Toshikazu; Ohmizu, Hiroshi; Hashimura, Yoshitada; Kubota, Hitoshi; Tanaka, Keiko

PATENT ASSIGNEE(S): Tanabe Seiyaku Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 70 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

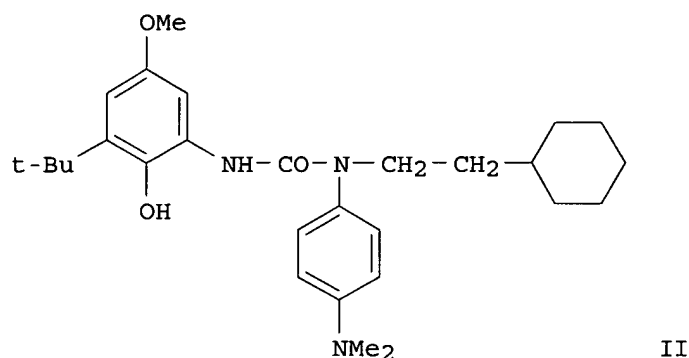
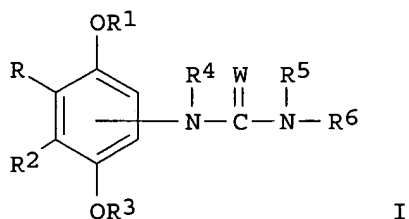
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11139969	A2	19990525	JP 1998-220951	19980805
PRIORITY APPLN. INFO.:			JP 1997-212376	A 19970807

OTHER SOURCE(S) : MARPAT 131:44643  
GI



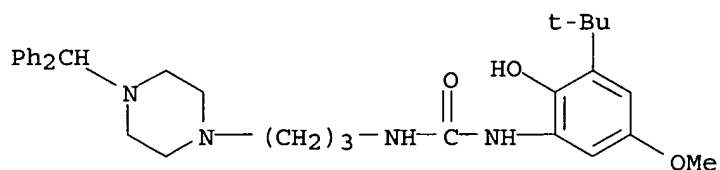
AB The title compds. I [R = H, (un)substituted alkyl, etc.; R1 = (un)substituted alkyl; R2 = (un)substituted alkyl, etc.; OR3= (protected) OH; R4 = H, (un)substituted alkyl, etc.; W = O, etc.; NR5R6 = (mono- or disubstituted) amino, etc.] are prepared The title compound II in vitro showed IC50 of 0.000067  $\mu$ M against ACAT.

IT 195312-37-9P 195312-64-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of phenol derivs. as antioxidants and ACAT inhibitors)

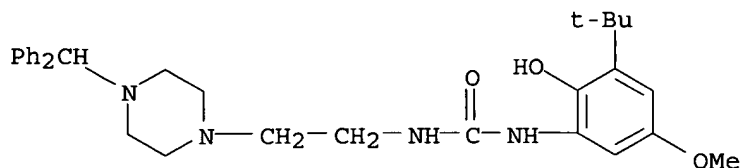
RN 195312-37-9 HCAPLUS

CN Urea, N-[3-(1,1-dimethylethyl)-2-hydroxy-5-methoxyphenyl]-N'-[3-[4-(diphenylmethyl)-1-piperazinyl]propyl]- (9CI) (CA INDEX NAME)



RN 195312-64-2 HCAPLUS

CN Urea, N-[3-(1,1-dimethylethyl)-2-hydroxy-5-methoxyphenyl]-N'-[2-[4-(diphenylmethyl)-1-piperazinyl]ethyl]-, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

L12 ANSWER 19 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:788775 HCAPLUS

DOCUMENT NUMBER: 130:38702

TITLE: Preparation of thiadiazole derivatives useful for the treatment of diseases related to connective tissue degradation

INVENTOR(S): Jacobsen, Eric J.; Mitchell, Mark A.; Schostarez, Heinrich J.; Harper, Donald E.

PATENT ASSIGNEE(S): Pharmacia & Upjohn Company, USA

SOURCE: U.S., 29 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5847148	A	19981208	US 1997-835599	19970410
PRIORITY APPLN. INFO.:			US 1997-835599	19970410

OTHER SOURCE(S): MARPAT 130:38702

AB Thiadiazole derivs. RNHC(:X)NHCHR1(CHR3)nCOR2 (R = 4,5-dihydro-5-thioxo-1,3,4-thiadiazol-2-yl; X = O, S; R1, R3 = H, alkyl, aralkyl, cycloalkylalkyl, alkoxyalkyl, etc.; R2 = OH, alkoxy, aryloxy, amino group; n = 0, 1) were prepared for inhibition of various enzymes from the matrix metalloproteinase family, predominantly stromelysins, and thus are useful for the treatment of matrix metallo endoproteinase diseases. Thus, N-[[[(4,5-dihydro-5-thioxo-1,3,4-thiadiazol-2-yl)amino]carbonyl]-L-phenylalanine Me ester, prepared by reaction of L-phenylalanine Me ester hydrochloride with phosgene and 5-amino-1,3,4-thiadiazole-2-thiol, showed  $K_i = 0.9 \mu\text{M}$  for inhibition of stromelysin.

IT 198701-11-0P

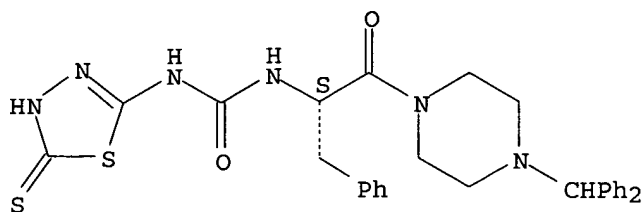
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of thiadiazole amino acid derivs. for treatment of diseases related to connective tissue degradation)

RN 198701-11-0 HCAPLUS

CN Piperazine, 1-[(2S)-2-[[[(4,5-dihydro-5-thioxo-1,3,4-thiadiazol-2-yl)amino]carbonyl]amino]-1-oxo-3-phenylpropyl]-4-(diphenylmethyl)- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 20 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:487581 HCAPLUS

DOCUMENT NUMBER: 129:216401

TITLE: Quantitative structure-activity analysis of novel hydroxyphenyl urea derivatives as antioxidants

AUTHOR(S): Nakao, Kazuya; Shimizu, Ryo; Kubota, Hitoshi; Yasuhara, Mikiko; Hashimura, Yoshimasa; Suzuki, Toshikazu; Fujita, Toshio; Ohmizu, Hiroshi

CORPORATE SOURCE: Lead Generation Research Laboratory, Tanabe Seiyaku Co., Ltd., Osaka, 532, Japan

SOURCE: Bioorganic & Medicinal Chemistry (1998), 6(6), 849-868  
CODEN: BMECEP; ISSN: 0968-0896

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A series of substituted hydroxyphenyl ureas was synthesized, the chemical structure of which was designed based on structures of natural antioxidants, vitamin E ( $\alpha$ -tocopherol) and uric acid. They exhibited high inhibitory activity against lipid peroxidn. In order to gain an insight into the mechanism of the inhibition reaction, their structure-activity relationships quant. were examined Electronic and steric effects of substituents on the phenolic hydroxyl group were shown to be of importance in governing the inhibitory potency. An increase in the electron donating property of substituents toward the phenolic hydroxyl group enhanced the antioxidative activity by the stabilization of an electron-deficient radical-type transition state. The steric shielding by ortho-substituents stabilized the phenoxy radicals formed following the transition state. Derivs. having a carboxyl group were only weakly active presumably because of an intermol. ion-dipole interaction of the phenolic hydroxyl group with the carboxylate anion which could retard the formation of the transition state.

IT 195312-37-9P 198756-51-3P 198756-52-4P

212651-71-3P 212651-72-4P 212651-76-8P

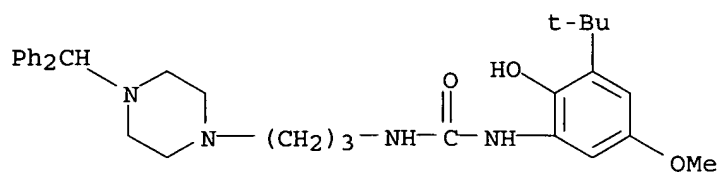
212651-78-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and antioxidant structure-activity relationship of hydroxyphenyl urea derivs.)

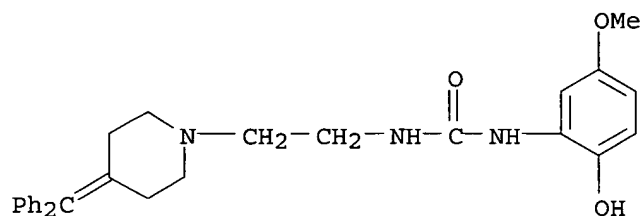
RN 195312-37-9 HCAPLUS

CN Urea, N-[3-(1,1-dimethylethyl)-2-hydroxy-5-methoxyphenyl]-N'-[3-[4-(diphenylmethyl)-1-piperazinyl]propyl]- (9CI) (CA INDEX NAME)



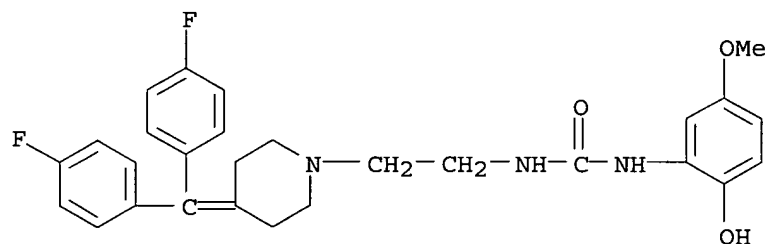
RN 198756-51-3 HCAPLUS

CN Urea, N-[2-[4-(diphenylmethylene)-1-piperidinyl]ethyl]-N'-(2-hydroxy-5-methoxyphenyl)- (9CI) (CA INDEX NAME)



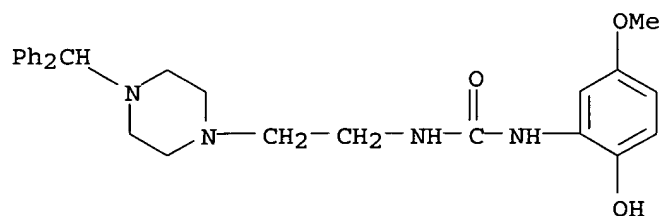
RN 198756-52-4 HCAPLUS

CN Urea, N-[2-[4-[bis(4-fluorophenyl)methylene]-1-piperidinyl]ethyl]-N'-(2-hydroxy-5-methoxyphenyl)- (9CI) (CA INDEX NAME)



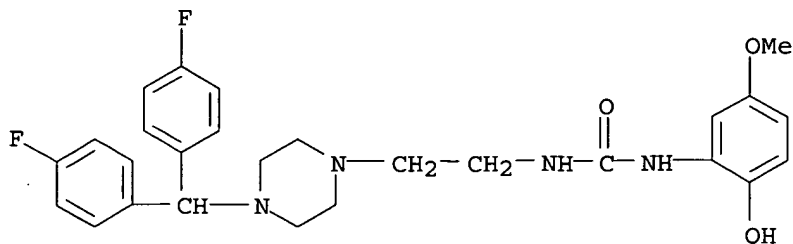
RN 212651-71-3 HCAPLUS

CN Urea, N-[2-[4-(diphenylmethyl)-1-piperazinyl]ethyl]-N'-(2-hydroxy-5-methoxyphenyl)- (9CI) (CA INDEX NAME)



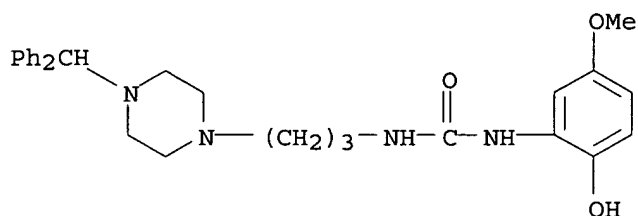
RN 212651-72-4 HCAPLUS

CN Urea, N-[2-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]ethyl]-N'-(2-hydroxy-5-methoxyphenyl)- (9CI) (CA INDEX NAME)



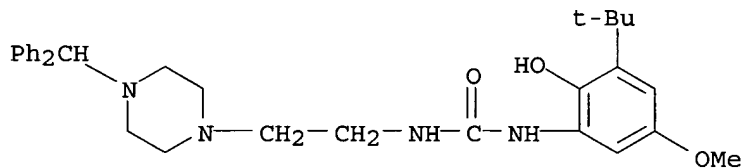
RN 212651-76-8 HCAPLUS

CN Urea, N-[3-[4-(diphenylmethyl)-1-piperazinyl]propyl]-N'-(2-hydroxy-5-methoxyphenyl)- (9CI) (CA INDEX NAME)



RN 212651-78-0 HCAPLUS

CN Urea, N-[3-(1,1-dimethylethyl)-2-hydroxy-5-methoxyphenyl]-N'-[2-[4-(diphenylmethyl)-1-piperazinyl]ethyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 21 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:743743 HCAPLUS

DOCUMENT NUMBER: 128:53200

TITLE: Optical resolution of diphenylpiperazines

INVENTOR(S): Yanagi, Masayuki; Yamada, Koji; Nakamichi, Norihiro; Takahashi, Motohiko

PATENT ASSIGNEE(S): Pola Chemical Industries, Inc., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09297126	A2	19971118	JP 1996-132694	19960430
JP 3521103	B2	20040419		

PRIORITY APPLN. INFO.:

JP 1996-132694

19960430

OTHER SOURCE(S): MARPAT 128:53200

AB Diphenylpiperazines useful as cardiovascular drugs are treated with aromatic isocyanate compds. to form diastereomers, which are subjected to HPLC with fluorescence detectors for optical resolution 1-[4,4-Bis(4-fluorophenyl)butyl]-4-(2-hydroxy-3-phenylaminopropyl)piperazine (I) 10 mg was reacted with 10 mg (-)-1-(1-naphthyl)ethyl isocyanate (II) at 5° for 72 h and the reaction product was analyzed by HPLC using ODS column with a mobile phase of acetonitrile/phosphate buffer (pH 4) to sep. 2 peaks, which corresponded to a reaction product of (R)-I and (S)-I with II, resp.

IT 198418-21-2P 198418-23-4P

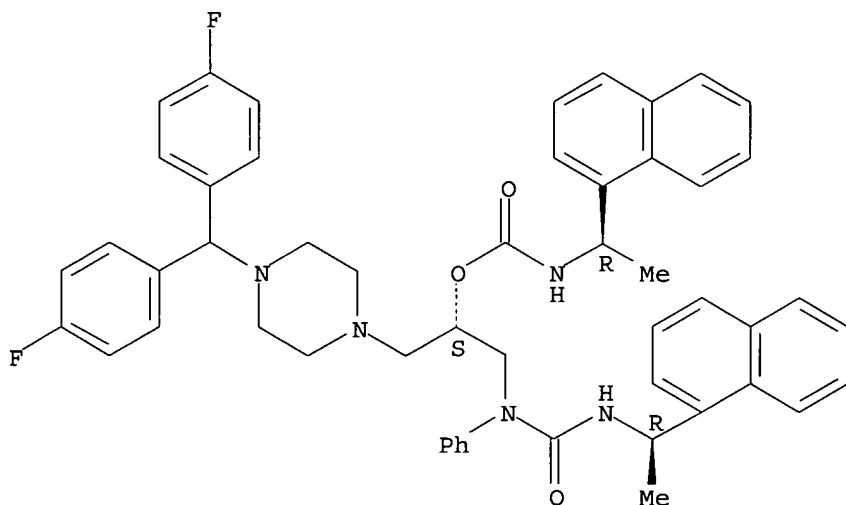
RL: ANT (Analyte); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation)

(optical resolution of diphenylpiperazines via chiral carbamate formation)

RN 198418-21-2 HCAPLUS

CN Carbamic acid, [1-(1-naphthalenyl)ethyl]-, 1-[[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl)methyl]-2-[[[1-(1-naphthalenyl)ethyl]amino]carbonyl]phenylamino]ethyl ester, [1S-[1R\*(S\*),2(S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

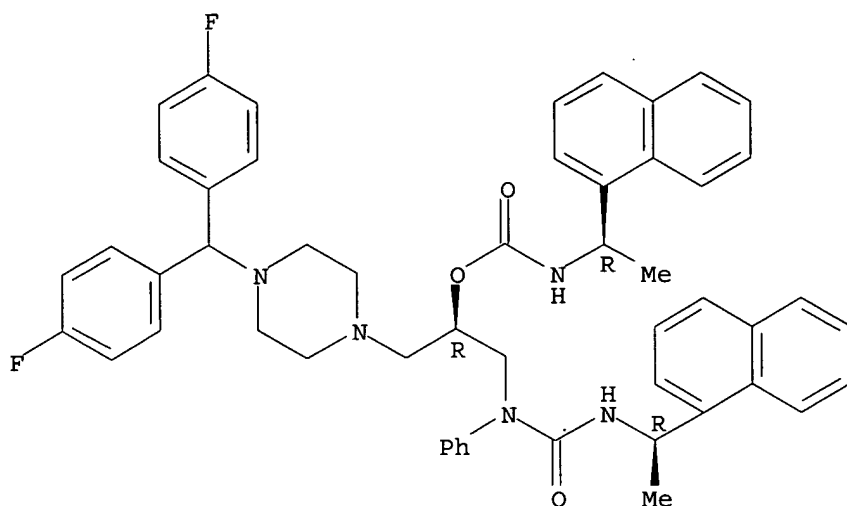


RN 198418-23-4 HCAPLUS

CN Carbamic acid, [1-(1-naphthalenyl)ethyl]-, 1-[[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl)methyl]-2-[[[1-(1-naphthalenyl)ethyl]amino]carbonyl]phenylamino]ethyl ester, [1R-[1R\*(R\*),2(R\*)]]- (9CI) (CA INDEX NAME)

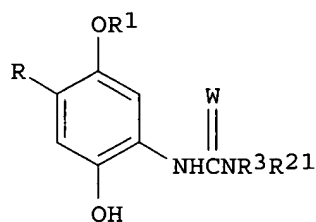
Absolute stereochemistry.



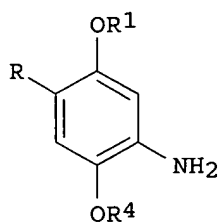


L12 ANSWER 22 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1997:731400 HCAPLUS  
 DOCUMENT NUMBER: 128:3549  
 TITLE: Preparation of N-(2,5-dihydroxyphenyl)urea derivatives  
 having antioxidant and active oxygen-quenching  
 activities  
 INVENTOR(S): Suzuki, Toshikazu; Omizu, Hiroshi; Hashimura,  
 Yoshimasa; Kubota, Hitoshi; Saito, Keiko  
 PATENT ASSIGNEE(S): Tanabe Seiyaku Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

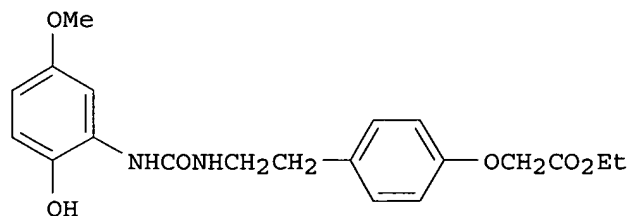
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09278737	A2	19971028	JP 1997-28583	19970213
PRIORITY APPLN. INFO.:			JP 1996-28843	A 19960216
OTHER SOURCE(S):	MARPAT	128:3549		
GI				



I



II



III

AB The title phenol derivs. [I; R = H, lower alkyl or alkoxy; R1 = lower alkyl; W = O, S, NR5; wherein R5 = H, lower alkyl, aryl, OH, lower alkoxy; R21 = substituted alkyl; R3 = H, (un)substituted lower alkyl; or NR21R3 = N-containing heterocyclyl] and pharmacol. acceptable salts thereof are prepared by reaction of 2,5-dihydroxyaniline derivs. (II; R, R1 = same as above; R4 = protecting group for the HO group) with COCl2 or triphosgene and then with HNR21R3 (R3, R21 = same as above) followed by deprotection. These compds. I also possess excellent activities for inhibiting lipid peroxidn., foam cell formation of macrophages, oxidative LDL formation, ACAT, and reperfusion-induced arrhythmia and are reduced in toxicity and thereby are useful for treatment and prevention of arteriosclerosis, ischemic diseases such as cerebral and myocardial infarction, cell damages during ischemia and/or reperfusion, inflammation, and arrhythmia (no data). Thus, a cooled (-78°) solution of COCl2 in CH2Cl2 was added dropwise to a solution of (2-amino-4-methoxyphenoxy)methoxymethane and Et3N in CH2Cl2 and after warming to 0°, the solvent was evaporated under reduced pressure to give a residue. The latter residue was dissolved in CH2Cl2, followed by adding dropwise a solution of 2-(4-ethoxycarbonylmethoxyphenyl)ethylamine hydrochloride and Et3N in CH2Cl2, and the resulting mixture was stirred at room temperature for 1 h to give,

after

treatment with a mixture of concentrated HCl and EtOH, the title compound (III).

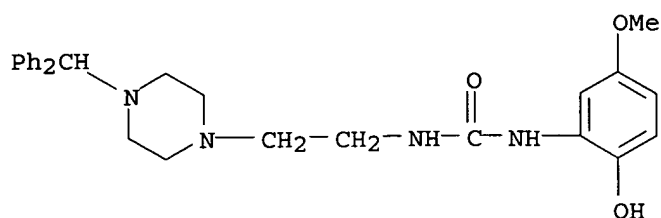
IT 198756-50-2P 198756-51-3P 198756-52-4P  
198756-58-0P 198756-59-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of N-(dihydroxyphenyl)urea derivs. having antioxidant and active oxygen-quenching activities for treatment of diseases)

RN 198756-50-2 HCAPLUS

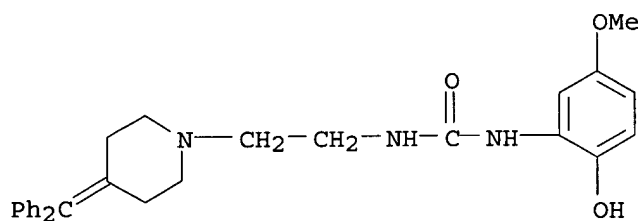
CN Urea, N-[2-[4-(diphenylmethyl)-1-piperazinyl]ethyl]-N'-(2-hydroxy-5-methoxyphenyl)-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

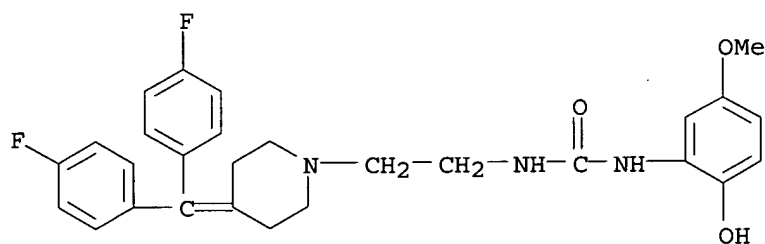
RN 198756-51-3 HCAPLUS

CN Urea, N-[2-[4-(diphenylmethylene)-1-piperidinyl]ethyl]-N'-(2-hydroxy-5-methoxyphenyl)- (9CI) (CA INDEX NAME)



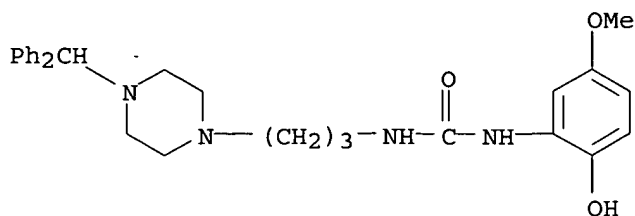
RN 198756-52-4 HCAPLUS

CN Urea, N-[2-[4-[bis(4-fluorophenyl)methylene]-1-piperidinyl]ethyl]-N'-(2-hydroxy-5-methoxyphenyl)- (9CI) (CA INDEX NAME)



RN 198756-58-0 HCAPLUS

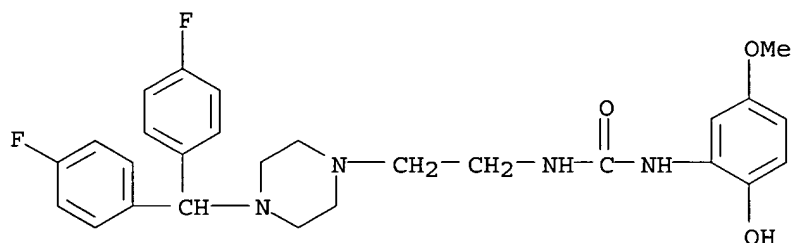
CN Urea, N-[3-[4-(diphenylmethyl)-1-piperazinyl]propyl]-N'-(2-hydroxy-5-methoxyphenyl)-, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

RN 198756-59-1 HCAPLUS

CN Urea, N-[2-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]ethyl]-N'-(2-hydroxy-5-methoxyphenyl)-, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

L12 ANSWER 23 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:717904 HCAPLUS

DOCUMENT NUMBER: 128:3886

TITLE: Preparation of thiadiazolyl(thio)ureas useful as matrix metalloprotease inhibitors

INVENTOR(S): Jacobsen, E. Jon; Mitchell, Mark A.; Schostarez, Heinrich Joseph; Harper, Donald E.

PATENT ASSIGNEE(S): Pharmacia & Upjohn Co., USA; Jacobsen, E. Jon; Mitchell, Mark A.; Schostarez, Heinrich Joseph; Harper, Donald E.

SOURCE: PCT Int. Appl., 85 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

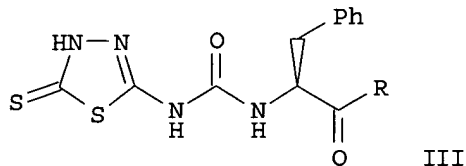
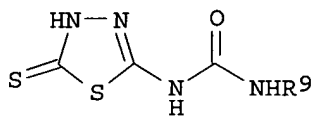
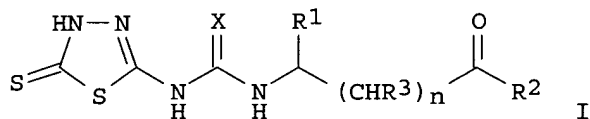
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9740031	A1	19971030	WO 1997-US5428	19970410
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ,				

VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB,  
 GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN,  
 ML, MR, NE, SN, TD, TG

AU 9726036	A1	19971112	AU 1997-26036	19970410
EP 900211	A1	19990310	EP 1997-917801	19970410
EP 900211	B1	20030702		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI				
JP 2000509039	T2	20000718	JP 1997-538079	19970410
AT 244229	E	20030715	AT 1997-917801	19970410
PT 900211	T	20031031	PT 1997-917801	19970410
ES 2202602	T3	20040401	ES 1997-917801	19970410
PRIORITY APPLN. INFO.:			US 1996-16003P	P 19960423
			WO 1997-US5428	W 19970410

OTHER SOURCE(S): MARPAT 128:3886  
 GI



AB Novel thiadiazole derivs. I [X = O, S; R1 = H, C1-6 alkyl, (CH2)0-4-aryl, (CH2)1-4-cycloalkyl, C1-4 alkyl-OR4, C1-4 alkyl-SR4, (CH2)1-4-heteroaryl, CO2R4, CONR52, (CH2)1-4-OSiR44; R2 = OR5, NR6R7; R3 = H, C1-6 alkyl, (CH2)0-4-aryl, (CH2)0-4-cycloalkyl, C1-4 alkyl-OR4, C1-4 alkyl-SR4, OR4; R4 = H, C1-6 alkyl, (CH2)0-4-aryl; R5 = H, C1-6 alkyl, aryl; R6, R7 = independently H, C1-6 alkyl, C1-6-OR4, (CH2)0-4-aryl, (CH2)1-4-cycloalkyl, (CH2)1-4-heteroaryl, CH2Q, (CH2)1-4-CO2R4, (CH2)1-4CONR52, 5-[[5-(dimethylamino)-1-naphthylsulfonyl]amino]pentyl; NR6R7 = azetidino, pyrrolidino, piperidino, morpholino, 4-thiomorpholino, 4-R8-substituted piperazino; R8 = H, C1-6 alkyl, (CH2)1-4-aryl, CHPh2, (CH2)1-4-heteroaryl; Q = saturated, 5- or 6-membered heterocycle containing 1-2 N, O, or S atoms; n

=  
 0, 1] and II (R9 = CH2Ph, CH2CH2Ph), or pharmaceutically acceptable salts thereof, are presented as inhibitors various enzymes from the matrix metalloproteinase family, predominantly stromelysins. Thus, I and II are useful for the treatment of matrix metalloendoproteinase diseases such as osteoarthritis, rheumatoid arthritis, septic arthritis, osteopenias such as osteoporosis, tumor metastasis (invasion and growth), periodontitis, gingivitis, corneal ulceration, dermal ulceration, gastric ulceration, and other diseases related to connective tissue degradation. Thus, reaction of L-phenylalanine Me ester isocyanate (preparation given) with 5-amino-1,3,4-thiadiazole-2-thiol in THF gave 58% Me ester III (R = OMe). Amidation of ester III (R = OMe) with MeNH2 gave amide III (R = NHMe). Ureas II (R = OMe, NHMe) and related compds. were tested for stromelysin inhibition, with III (R = OMe, NHMe) having Ki = 0.9 and 0.27 μM, resp.

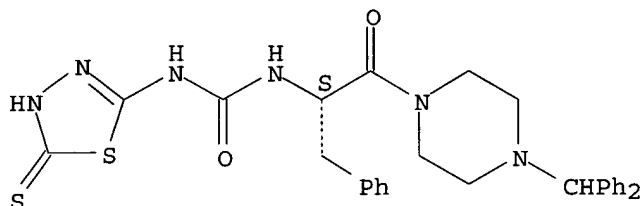
IT 198701-11-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of thiadiazolyl(thio)ureas useful as matrix metalloprotease inhibitors)

RN 198701-11-0 HCAPLUS

CN Piperazine, 1-[(2S)-2-[[[(4,5-dihydro-5-thioxo-1,3,4-thiadiazol-2-yl)amino]carbonyl]amino]-1-oxo-3-phenylpropyl]-4-(diphenylmethyl)- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.



L12 ANSWER 24 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:702033 HCAPLUS

DOCUMENT NUMBER: 127:358878

TITLE: Preparation of diphenylpiperazine diastereomers  
INVENTOR(S): Yanagi, Masayuki; Namiki, Takayuki; Yamada, Koji;  
Nakamichi, Norihiro; Kimura, Makoto; Kawakatsu,  
Yasuyuki; Takahashi, Motohiko

PATENT ASSIGNEE(S): Pola Chemical Industries, Inc., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 18 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

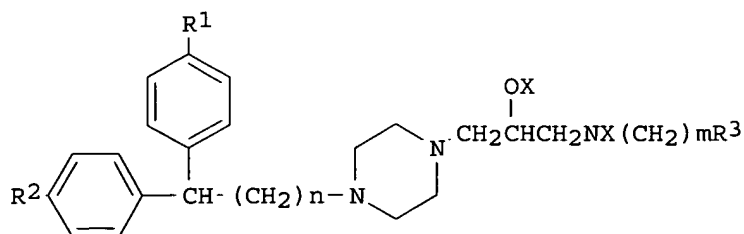
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09278769	A2	19971028	JP 1996-115830	19960412
JP 3577161	B2	20041013		
PRIORITY APPLN. INFO.:			JP 1996-115830	19960412
OTHER SOURCE(S):	MARPAT	127:358878		

GI



I

AB Diphenylpiperazine diastereomers I [X = CONHCHR4R5; R1, R2 = H, halo; R3,

R4 = (substituted) C6-12 aromatic hydrocarbon; R5 = C1-4 alkyl; m, n = 0-4], useful as standard substances to analyze optical purity of diphenylpiperazines, which are useful as pharmaceuticals for treatment of circulatory organs and central nervous systems, are prepared by reaction of diphenylpiperazines I (X = H; R1, R2, R3, m, n = same as above) with optically active R4CHR5NCO (R4, R5 = same as above). A MeCN solution of 200 mg S-(-)-I (X = H, R1, R2 = F, R3 = Ph, m = 0, n = 3) [S-(-)-II] was treated with 400 mg R-(-)-1-(1-naphthyl)ethyl isocyanate (III) at 50° for 40 min to give 250 mg (R, R, R)-I [R1, R2, R3, m, n = same as S-(-)-II, X = CONHCHR4R5, R4 = Me, R5 = 1-naphthyl]. Racemic II was added with III in THF-MeCN at 50° for 40 min and analyzed using HPLC to show two peaks of about equal area.

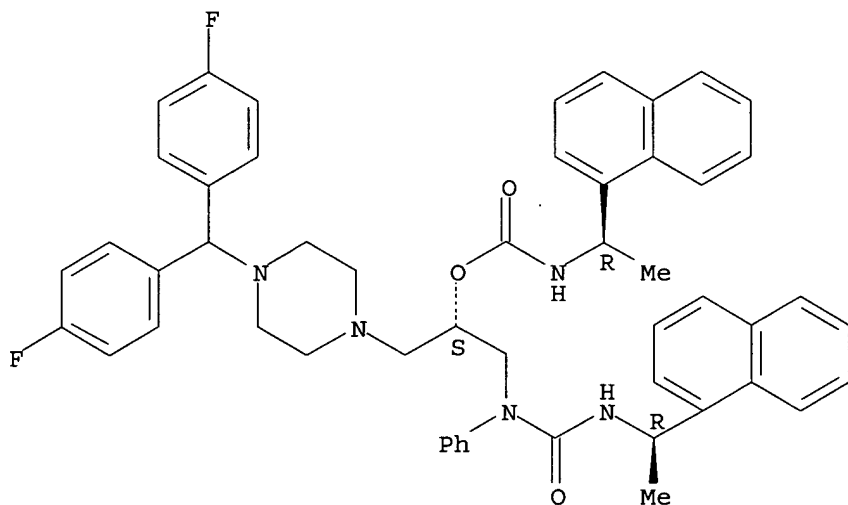
IT 198418-21-2P 198418-23-4P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of diphenylpiperazine diastereomers by reaction of diphenylpiperazines with isocyanates)

RN 198418-21-2 HCAPLUS

CN Carbamic acid, [1-(1-naphthalenyl)ethyl]-, 1-[[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]methyl]-2-[[[1-(1-naphthalenyl)ethyl]amino]carbonyl]phenylamino]ethyl ester, [1S-[1R\*(S\*),2(S\*)]]- (9CI) (CA INDEX NAME)

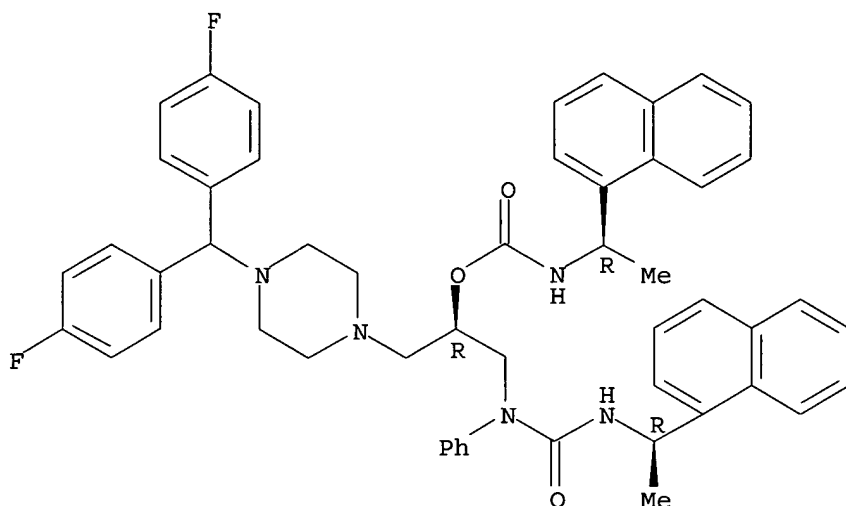
Absolute stereochemistry.



RN 198418-23-4 HCAPLUS

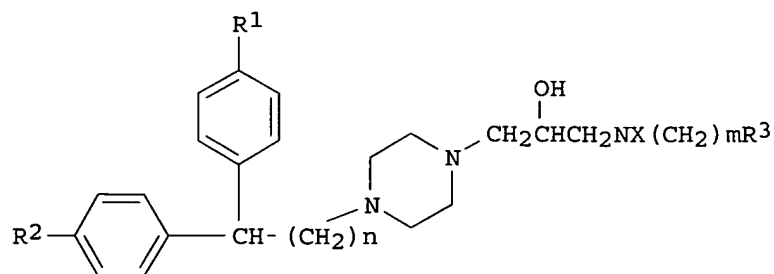
CN Carbamic acid, [1-(1-naphthalenyl)ethyl]-, 1-[[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]methyl]-2-[[[1-(1-naphthalenyl)ethyl]amino]carbonyl]phenylamino]ethyl ester, [1R-[1R\*(R\*),2(R\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L12 ANSWER 25 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1997:702032 HCAPLUS  
 DOCUMENT NUMBER: 127:358877  
 TITLE: Preparation of diphenylpiperazine diastereomers  
 INVENTOR(S): Yanagi, Masayuki; Namiki, Takayuki; Yamada, Koji;  
 Nakamichi, Norihiro; Kimura, Makoto; Kawakatsu,  
 Tsuneyuki; Takahashi, Motohiko  
 PATENT ASSIGNEE(S): Pola Chemical Industries, Inc., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 20 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09278768	A2	19971028	JP 1996-115810	19960412
JP 3577160	B2	20041013		
PRIORITY APPLN. INFO.:			JP 1996-115810	19960412
OTHER SOURCE(S):	MARPAT	127:358877		
GI				



I



AB Diphenylpiperazine diastereomers I [X = CONHCHR<sub>4</sub>R<sub>5</sub>; R<sub>1</sub>, R<sub>2</sub> = H, halo; R<sub>3</sub>, R<sub>4</sub> = (substituted) C<sub>6</sub>-12 aromatic hydrocarbon; R<sub>5</sub> = C<sub>1</sub>-4 alkyl; m, n = 0-4], useful as standard substances to analyze optical purity of diphenylpiperazines, which are useful as pharmaceuticals for treatment of circulatory organs and central nervous systems, are prepared by reaction of diphenylpiperazines I (X = H; R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, m, n = same as above) with optically active R<sub>4</sub>CHR<sub>5</sub>NCO (R<sub>4</sub>, R<sub>5</sub> = same as above). A MeCN solution of 240 mg S-(-)-I (X = H, R<sub>1</sub>, R<sub>2</sub> = F, R<sub>3</sub> = Ph, m = 0, n = 3) [S-(-)-II] was treated with 210 mg R-(-)-1-(1-naphthyl)ethyl isocyanate (III) under ice cooling for 40 min and at room temperature for 19 h to give 250 mg (R, R)-I

[R<sub>1</sub>,

R<sub>2</sub>, R<sub>3</sub>, m, n = same as S-(-)-II, X = CONHCHMeR<sub>5</sub>, R<sub>5</sub> = 1-naphthyl]. Racemic II was added with III in THF at 5° for 48 h and analyzed using HPLC to show two peaks of about equal area.

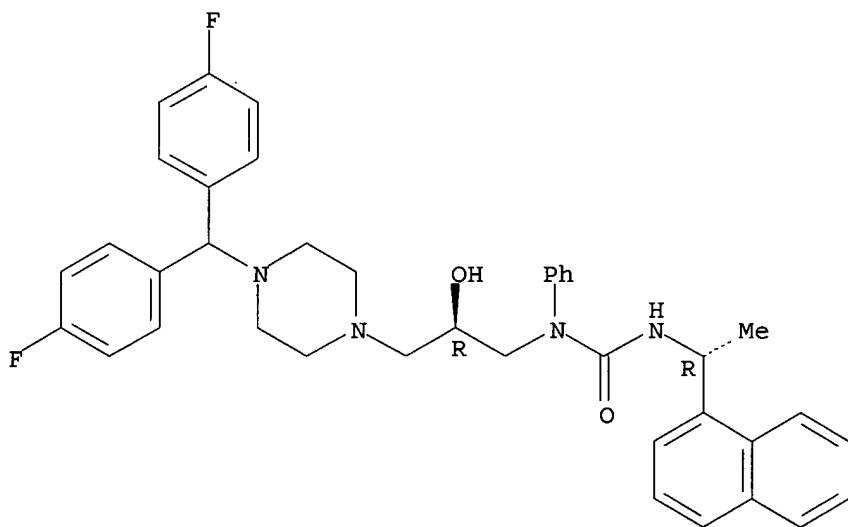
IT 198332-07-9P 198332-08-0P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of diphenylpiperazine diastereomers by reaction of diphenylpiperazines with isocyanates)

RN 198332-07-9 HCAPLUS

CN Urea, N-[3-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]-2-hydroxypropyl]-N'-[1-(1-naphthalenyl)ethyl]-N-phenyl-, [R-(R\*,R\*)]- (9CI) (CA INDEX NAME)

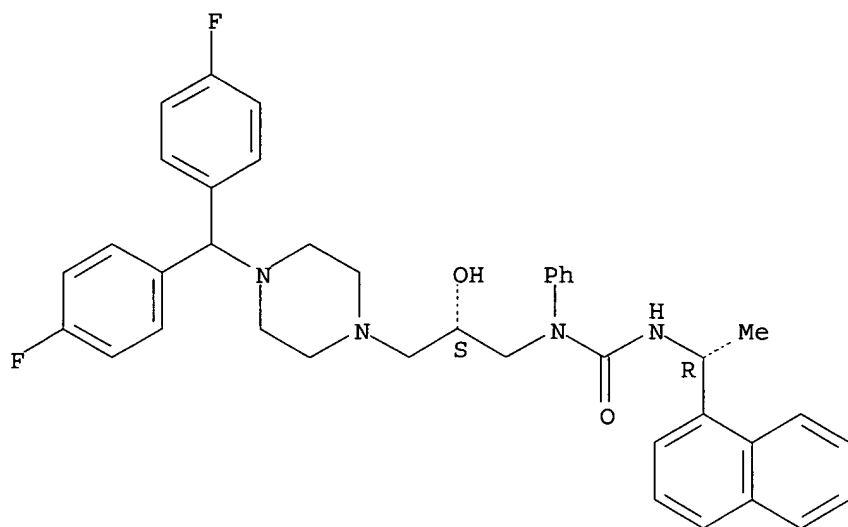
Absolute stereochemistry.



RN 198332-08-0 HCAPLUS

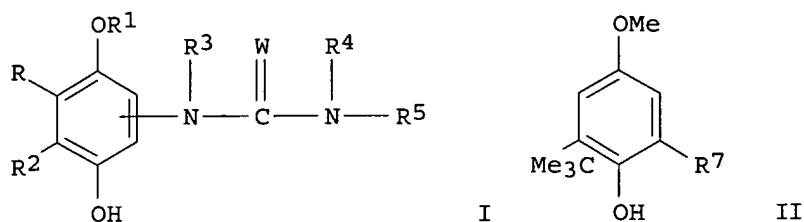
CN Urea, N-[3-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]-2-hydroxypropyl]-N'-[1-(1-naphthalenyl)ethyl]-N-phenyl-, [S-(R\*,S\*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L12 ANSWER 26 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1997:589063 HCAPLUS  
 DOCUMENT NUMBER: 127:234183  
 TITLE: Ureidophenols as ACAT inhibitors and antioxidants  
 INVENTOR(S): Suzuki, Toshikazu; Ohmizu, Hiroshi; Hashimura, Yoshimasa; Kubota, Hitoshi; Tanaka, Keiko  
 PATENT ASSIGNEE(S): Tanabe Seiyaku Co., Ltd., Japan  
 SOURCE: Eur. Pat. Appl., 84 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 790240	A1	19970820	EP 1997-102315	19970213
R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
CA 2197364	AA	19970816	CA 1997-2197364	19970212
JP 10195037	A2	19980728	JP 1997-28582	19970213
US 5849732	A	19981215	US 1997-800680	19970214
CN 1165815	A	19971126	CN 1997-101973	19970217
PRIORITY APPLN. INFO.:			JP 1996-28083	A 19960215
			JP 1996-300032	A 19961112
OTHER SOURCE(S):	MARPAT 127:234183			
GI				



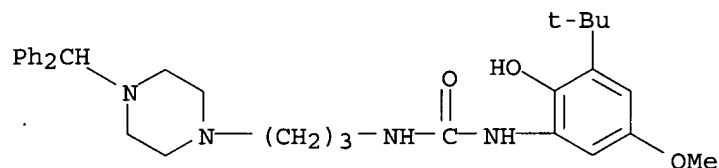
AB Ureidophenols I [R = H, alkyl, alkyloxy; R1 = alkyl; R2 = alkyl, alkoxy; R3 = H, alkyl, acyl; W = O, S or NR6; NR4R5 = (un)substituted NH2, N heterocycle; R6 = H, alkyl, aryl, OH, alkoxy] were prepared I possess both an ACAT inhibitory activity and an antioxidative activity (no data). Thus, 4,2-MeO(Me3C)C6H3OH was treated with 4-MeOC6H4NH2 to give the azobenzene II [R7 = N:NC6H4OMe-4], which was O-protected, reduced to the amine, treated with PhNCO, and O-deprotected to give the ureidophenol II [R7 = NHCONHPh].

IT 195312-37-9P 195312-64-2P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of ureidophenols as ACAT inhibitors and antioxidants)

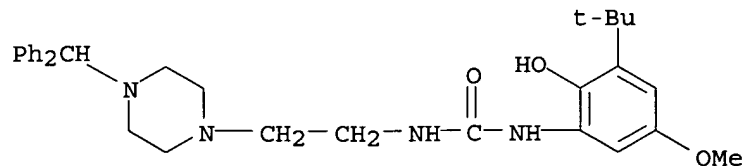
RN 195312-37-9 HCAPLUS

CN Urea, N-[3-(1,1-dimethylethyl)-2-hydroxy-5-methoxyphenyl]-N'-[3-[4-(diphenylmethyl)-1-piperazinyl]propyl]- (9CI) (CA INDEX NAME)



RN 195312-64-2 HCAPLUS

CN Urea, N-[3-(1,1-dimethylethyl)-2-hydroxy-5-methoxyphenyl]-N'-[2-[4-(diphenylmethyl)-1-piperazinyl]ethyl]-, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

L12 ANSWER 27 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:587687 HCAPLUS

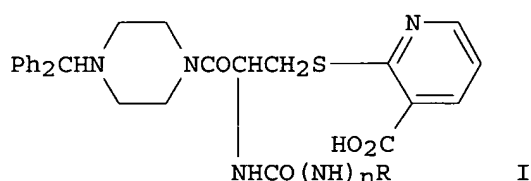
DOCUMENT NUMBER: 127:293639

TITLE: Preparation of anticholecystokin compounds derived

from serine  
 INVENTOR(S): Ogawa, Masashi; Morita, Tadashi; Matsuda, Satoshi;  
 Iibuchi, Norihiro; Suzuki, Hideaki; Kidokoro, Shinpei  
 PATENT ASSIGNEE(S): Tobishi Pharmaceutical Co., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 18 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09227523	A2	19970902	JP 1996-61621	19960226
PRIORITY APPLN. INFO.:			JP 1996-61621	19960226
OTHER SOURCE(S):	MARPAT	127:293639		

GI



AB Title compds. I [R = (substituted) Ph, naphthyl, thiazolopyrimidinyl, pyrazolopyrimidinyl, (benzene-condensed) O-, N-, and/or S-containing 5- or 6-membered heterocyclyl; n = 0, 1] or their salts are useful for prevention and treatment of pancreatitis, pancreatic cancer, duodenal ulcer, gastric ulcer, etc. (R)-4-diphenylmethyl-1-[3-(3-ethoxycarbonyl-2-pyridyl)thio-2-tert-butoxycarbonylamino]propionylpiperazine (preparation given) was treated with HCl in CH<sub>2</sub>Cl<sub>2</sub> at room temperature for 20 min and treated with o-tolyl isocyanate at room temperature for 3 h to give 72% ureide, which was hydrolyzed with LiOH in THF-H<sub>2</sub>O-MeOH at room temperature for 2 h to give 93% (R)-I (R = C<sub>6</sub>H<sub>4</sub>Me-2, n = 1). (R)-I (R = 2-amino-4-chlorophenyl, n = 0) in vitro inhibited cholecystokinin-induced contraction of guinea pig ileum with IC<sub>50</sub> of 3.0 + 10<sup>-7</sup>M.

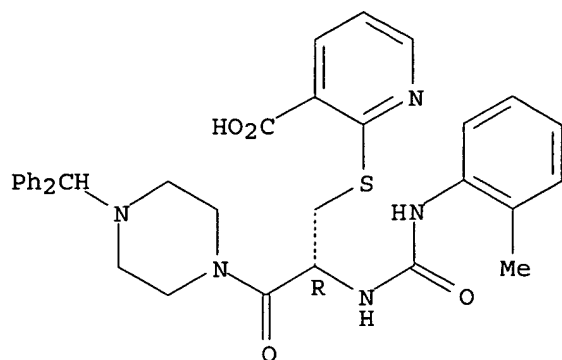
IT 196932-67-9P 196932-68-0P 196933-03-6P  
 196933-06-9P 196933-08-1P 196933-24-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of serine derivs. as anticholecystokinin compds.)

RN 196932-67-9 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-[[[3-[4-(diphenylmethyl)-1-piperazinyl]-2-[[[(2-methylphenyl)amino]carbonyl]amino]-3-oxopropyl]thio]-, (R)- (9CI)  
 (CA INDEX NAME)

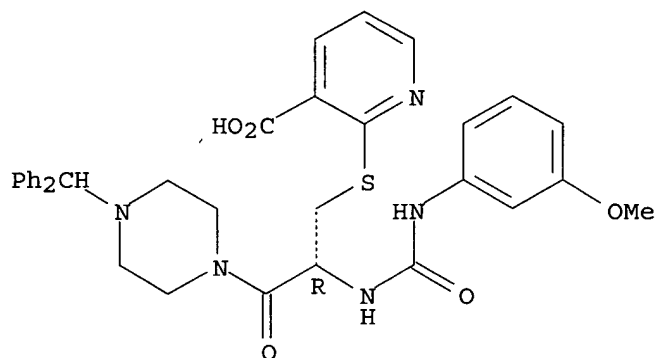
Absolute stereochemistry. Rotation (+).



RN 196932-68-0 HCAPLUS

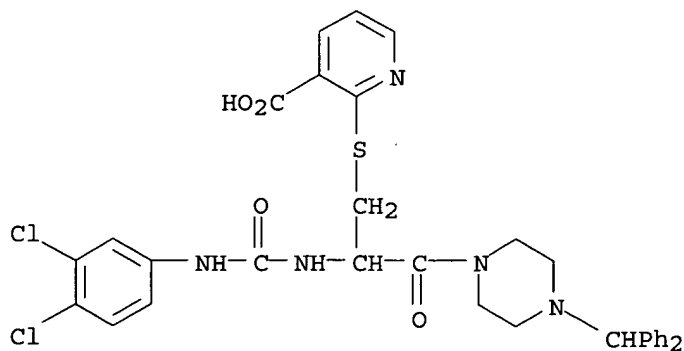
CN 3-Pyridinecarboxylic acid, 2-[[3-[4-(diphenylmethyl)-1-piperazinyl]-2-[[[(3-methoxyphenyl)amino]carbonyl]amino]-3-oxopropyl]thio]-, (R)- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



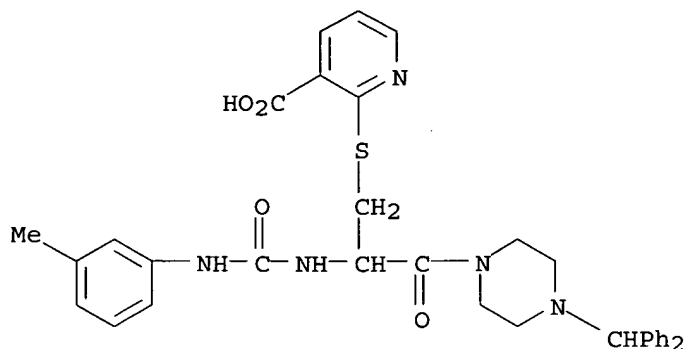
RN 196933-03-6 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-[[2-[[[(3,4-dichlorophenyl)amino]carbonyl]amino]-3-[4-(diphenylmethyl)-1-piperazinyl]-3-oxopropyl]thio]- (9CI) (CA INDEX NAME)



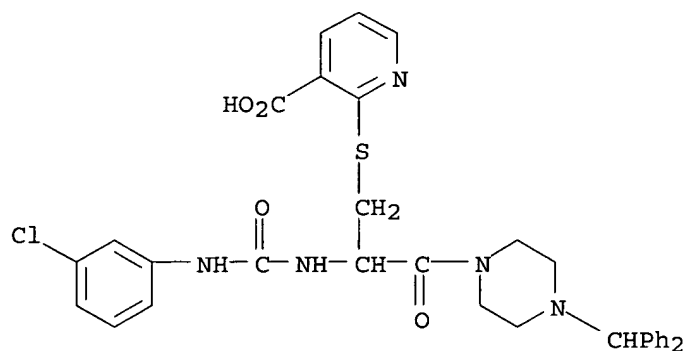
RN 196933-06-9 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-[[3-[4-(diphenylmethyl)-1-piperazinyl]-2-  
[[[(3-methylphenyl)amino]carbonyl]amino]-3-oxopropyl]thio]- (9CI) (CA  
INDEX NAME)



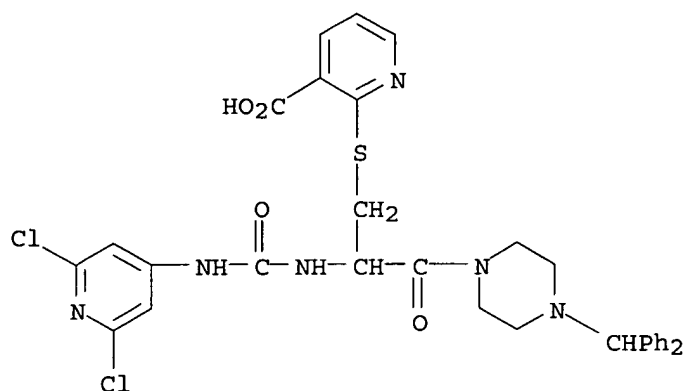
RN 196933-08-1 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-[[2-[[[(3-chlorophenyl)amino]carbonyl]amino]-  
3-[4-(diphenylmethyl)-1-piperazinyl]-3-oxopropyl]thio]- (9CI) (CA INDEX  
NAME)



RN 196933-24-1 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-[[2-[[[(2,6-dichloro-4-  
pyridinyl)amino]carbonyl]amino]-3-[4-(diphenylmethyl)-1-piperazinyl]-3-  
oxopropyl]thio]- (9CI) (CA INDEX NAME)



IT 196933-38-7P 196933-39-8P 196933-60-5P

196933-64-9P 196933-65-0P 196933-81-0P

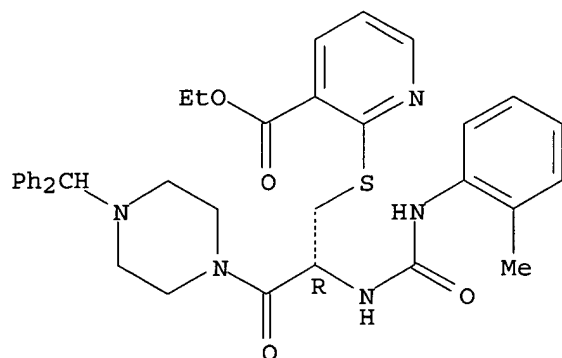
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of serine derivs. as anticholecystokinins compds.)

RN 196933-38-7 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-[[3-[4-(diphenylmethyl)-1-piperazinyl]-2-[[[(2-methylphenyl)amino]carbonyl]amino]-3-oxopropyl]thio]-, ethyl ester, (R)- (9CI) (CA INDEX NAME)

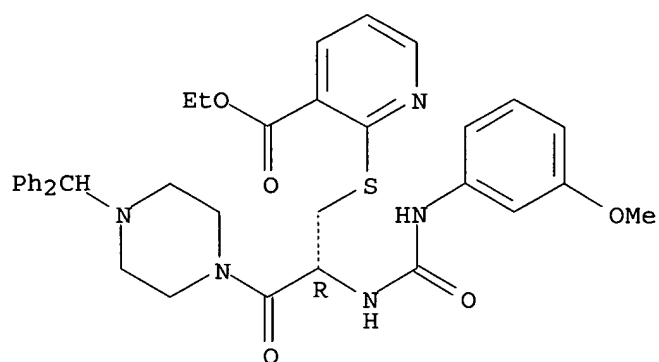
Absolute stereochemistry.



RN 196933-39-8 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-[[3-[4-(diphenylmethyl)-1-piperazinyl]-2-[[[(3-methoxyphenyl)amino]carbonyl]amino]-3-oxopropyl]thio]-, ethyl ester, (R)- (9CI) (CA INDEX NAME)

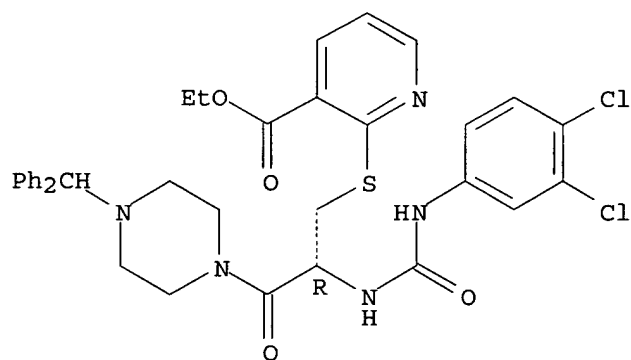
Absolute stereochemistry.



RN 196933-60-5 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-[[2-[[[(3,4-dichlorophenyl)amino]carbonyl]amino]-3-[4-(diphenylmethyl)-1-piperazinyl]-3-oxopropyl]thio]-, ethyl ester, (R)- (9CI) (CA INDEX NAME)

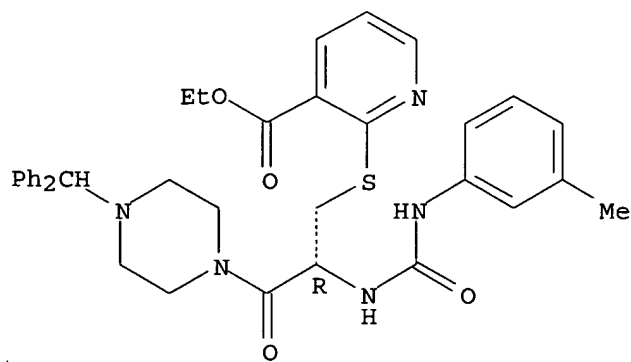
Absolute stereochemistry.



RN 196933-64-9 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-[[3-[4-(diphenylmethyl)-1-piperazinyl]-2-[[[(3-methylphenyl)amino]carbonyl]amino]-3-oxopropyl]thio]-, ethyl ester, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

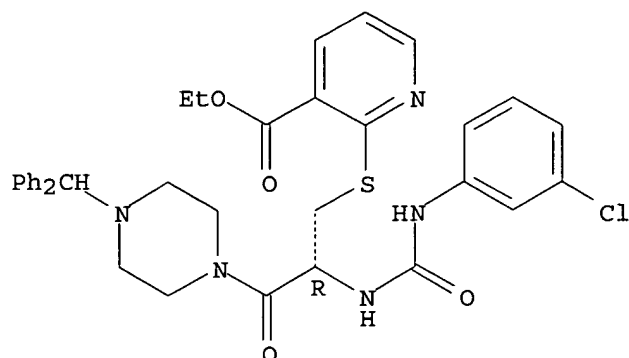




RN 196933-65-0 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-[[2-[[[(3-chlorophenyl)amino]carbonyl]amino]-3-[4-(diphenylmethyl)-1-piperazinyl]-3-oxopropyl]thio]-, ethyl ester, (R)-(9CI) (CA INDEX NAME)

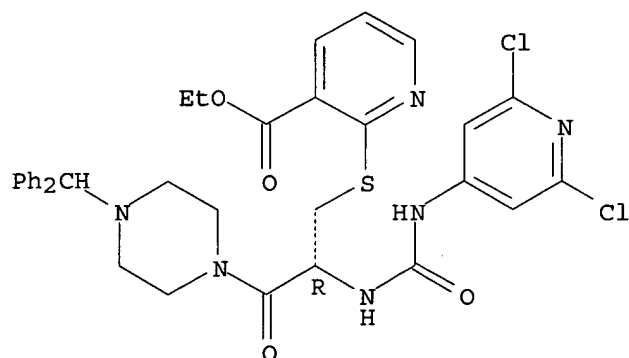
Absolute stereochemistry.



RN 196933-81-0 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-[[2-[[[(2,6-dichloro-4-pyridinyl)amino]carbonyl]amino]-3-[4-(diphenylmethyl)-1-piperazinyl]-3-oxopropyl]thio]-, ethyl ester, (R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



L12 ANSWER 28 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1996:132309 HCAPLUS

DOCUMENT NUMBER: 124:289330

TITLE: Synthesis and pharmacology of combined histamine H1-H2-receptor antagonists containing diphenhydramine and cyproheptadine derivatives

AUTHOR(S): Wolf, Cornelia; Shunack, Walter

CORPORATE SOURCE: Institut für Pharmazie, Freie Universität Berlin, Berlin, D-14195, Germany

SOURCE: Archiv der Pharmazie (Weinheim, Germany) (1996), 329(2), 87-94

CODEN: ARPMAS; ISSN: 0365-6233

PUBLISHER: VCH

DOCUMENT TYPE: Journal

LANGUAGE: English

GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The classical histamine H1-receptor antagonists diphenhydramine and cyproheptadien and their derivs. were connected with a 2-guanidinethiazole containing structure derived from the H2-receptor antagonist tiotidine in order to obtain combined H1-/H2-receptor antagonists. The two moieties were not directly linked together, but were separated by a polymethylene spacer and a polar group (nitroethenediamine or urea). Thus 12 compds. were obtained that proved in vitro to possess high H1- and H2-receptor antagonist activity at the isolated guinea-pig ileum (H1) and the isolated guinea-pig right atrium (H2), resp. The incorporation of the diphenhydramine as well as the cyproheptadine component provides high affinity to H1-receptors. The tricyclic cyproheptadine and its 10,11-dihydro derivative (e.g., I), however, cause a decrease of H2-receptor antagonist potency compared to the diphenhydramines (e.g., II and III; X=H, Cl, F, Me). Using nitroethenediamine as the polar group is apparently more favorable to H1- and H2-receptor affinity as the urea function. All compds. elicit a dual mode of competitive and noncompetitive antagonism. Among the novel compds. the nitroethenediamines with 4-fluoro- or 4-methyl-substituted diphenhydramine as H1-receptor antagonist moiety (II; X=F, Me) display the most potent H1- and H2-receptor antagonist effects. The presented concept is a very promising way to combine H1- and H2-receptor antagonist properties in one mol.

IT 175692-43-0P

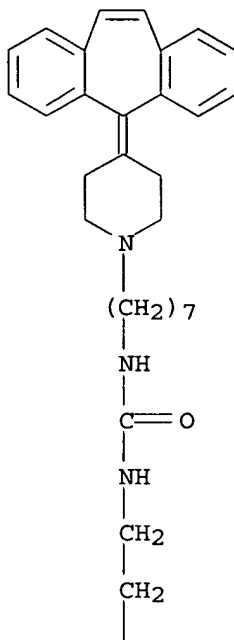
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and histamine H1- and H2-receptor antagonism of nitroethenediamines and ureas containing diphenhydramine and cyproheptadine derivs.)

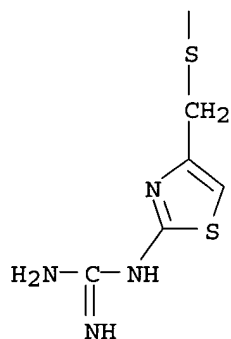
RN 175692-43-0 HCAPLUS

CN Urea, N-[2-[[[2-[(aminoiminomethyl)amino]-4-thiazolyl]methyl]thio]ethyl]-N'-[7-[4-(5H-dibenzo[a,d]cyclohepten-5-ylidene)-1-piperidinyl]heptyl]-(9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



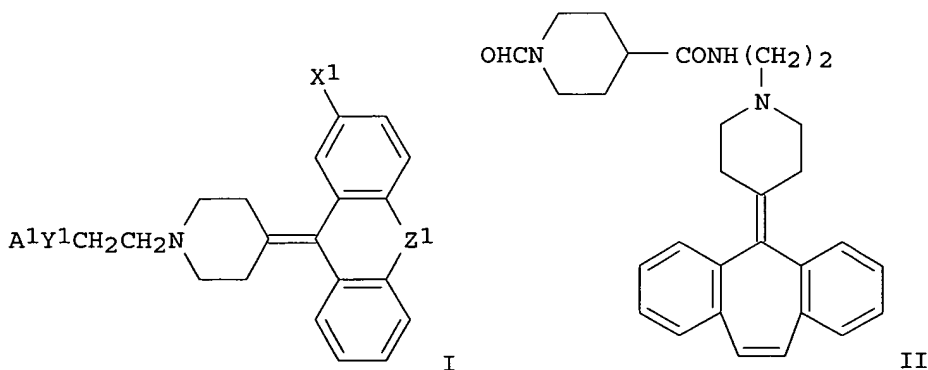
L12 ANSWER 29 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1995:997894 HCAPLUS  
 DOCUMENT NUMBER: 124:175843  
 TITLE: Preparation of piperidine-derivative blood platelet aggregation inhibitors and serotonin antagonists  
 INVENTOR(S): Makino, Shingo; Arisaka, Harumi; Yamamoto, Hiroshi; Shoji, Masataka; Yoshimoto, Ryota  
 PATENT ASSIGNEE(S): Ajinomoto co., Inc., Japan  
 SOURCE: Eur. Pat. Appl., 17 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 682015	A1	19951115	EP 1995-302647	19950420
EP 682015	B1	20010822		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
CA 2147429	AA	19951021	CA 1995-2147429	19950420
CN 1112560	A	19951129	CN 1995-104192	19950420
CN 1056143	B	20000906		
JP 08003135	A2	19960109	JP 1995-94676	19950420
JP 2962186	B2	19991012		
JP 2001002571	A2	20010109	JP 2000-175490	19950420
EP 1103544	A2	20010530	EP 2001-103999	19950420
EP 1103544	A3	20010606		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE				
AT 204566	E	20010915	AT 1995-302647	19950420
ES 2161828	T3	20011216	ES 1995-302647	19950420
PT 682015	T	20020130	PT 1995-302647	19950420
US 5932593	A	19990803	US 1997-917180	19970825
JP 11246526	A2	19990914	JP 1998-372550	19981228
JP 3215676	B2	20011009		
US 2002019533	A1	20020214	US 1999-245846	19990208
US 2002147195	A1	20021010	US 2002-101980	20020321
US 2004063701	A1	20040401	US 2003-658322	20030910
PRIORITY APPLN. INFO.:				
			JP 1994-81499	A 19940420
			EP 1995-302647	A3 19950420
			JP 1995-94676	A3 19950420
			JP 1998-372550	A3 19950420
			US 1995-425645	B1 19950420
			US 1997-917180	A1 19970825
			US 1999-245846	B3 19990208
			US 2002-101980	B1 20020321

OTHER SOURCE(S):  
GI

MARPAT 124:175843

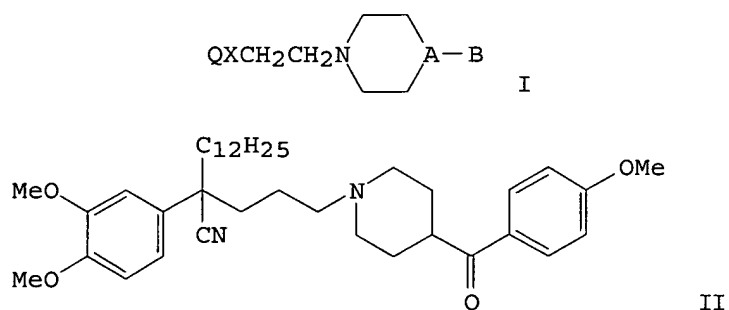


AB The title compds. [I; A1 = (un)substituted pyridyl, piperidyl, piperidino, morpholinyl, morpholino, thiomorpholinyl, thiomorpholino, piperazinyl, (un)substituted alkyl or cycloalkyl, etc.; X1 = H, halogen atom; Y1 = CONH, NHCO, CONHCH2, O(CH2)n, CO2; n = 0-4; Z1 = CH=CH, SCH2, S, CH2CH2], useful as blood platelet aggregation inhibitors which specifically inhibit the serotonin 2 receptor, are prepared Thus, piperidine derivative II was prepared which demonstrated a pKi of 8.4.

ACCESSION NUMBER: 1994:270115 HCAPLUS  
 DOCUMENT NUMBER: 120:270115  
 TITLE: Ethylamine derivatives and antihypertensives  
 containing the same  
 INVENTOR(S): Shoji, Masataka; Toyota, Kozo; Eguchi, Chikahiko;  
 Yoshimoto, Ryota; Koyama, Yosikatsu; Domoto, Hideki;  
 Kamimura, Akira  
 PATENT ASSIGNEE(S): Ajinomoto Co., Inc., Japan  
 SOURCE: U.S., 34 pp. Cont.-in-part of U.S. Ser. No. 201,911,  
 abandoned.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 4  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5231105	A	19930727	US 1989-354880	19890522
US 5250681	A	19931005	US 1991-655775	19910215
US 5393890	A	19950228	US 1994-269628	19940701
US 38257	E	20030923	US 1999-248236	19990210
PRIORITY APPLN. INFO.:			JP 1987-138405	A 19870602
			US 1988-201911	B2 19880602
			JP 1988-293408	A 19881118
			JP 1988-303461	A 19881130
			JP 1989-64059	A 19890316
			US 1989-354880	A2 19890522
			US 1989-443438	B2 19891130
			US 1991-655775	A1 19910215
			US 1993-72458	B1 19930607
			US 1994-269628	A5 19940701

OTHER SOURCE(S): MARPAT 120:270115  
 GI



AB The title compds., such as cyclic ethylamine derivs. I (AB = substituted phenylcarbonyl; Q = aryl; X = alkyl) and their uses as antihypertensives are claimed. For example,  $\alpha$ -(3,4-dimethoxyphenyl)- $\alpha$ -[3-[4-(4-methoxybenzoyl)piperidin-1-yl]propyl]tridecanenitrile (II) is claimed.

IT 130374-95-7P 153510-20-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

IT 173722-38-8P 173722-43-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

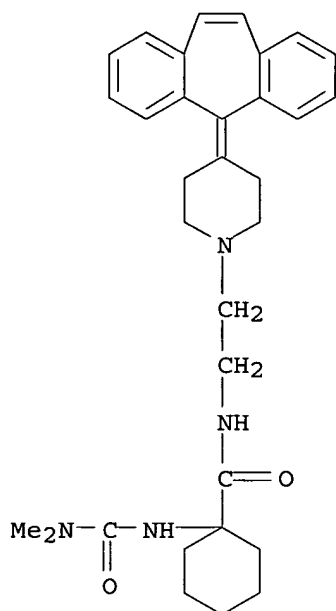
(preparation of piperidine-derivative blood platelet aggregation inhibitors

and

serotonin antagonists)

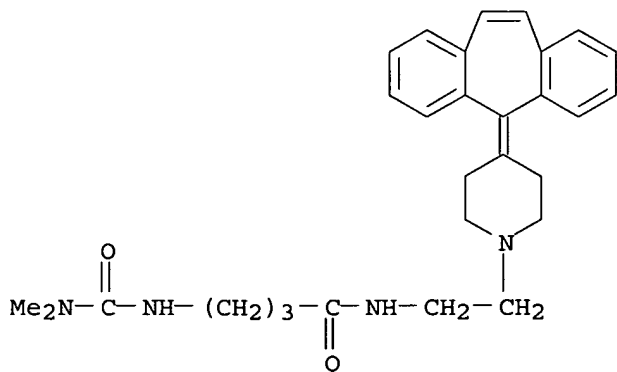
RN 173722-38-8 HCAPLUS

CN Cyclohexanecarboxamide, N-[2-[4-(5H-dibenzo[a,d]cyclohepten-5-ylidene)-1-piperidinyl]ethyl]-1-[[dimethylamino]carbonyl]amino] - (9CI) (CA INDEX NAME)



RN 173722-43-5 HCAPLUS

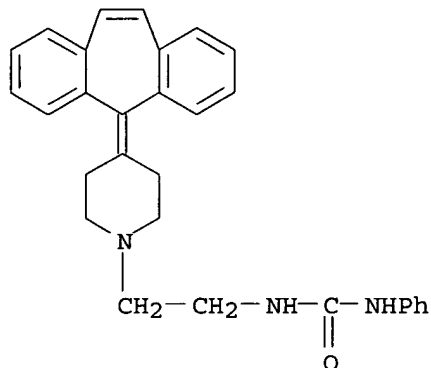
CN Butanamide, N-[2-[4-(5H-dibenzo[a,d]cyclohepten-5-ylidene)-1-piperidinyl]ethyl]-4-[[dimethylamino]carbonyl]amino] - (9CI) (CA INDEX NAME)



(preparation of, as antihypertensive)

RN 130374-95-7 HCAPLUS

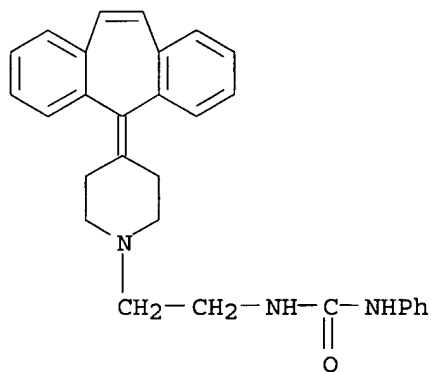
CN Urea, N-[2-[4-(5H-dibenzo[a,d]cyclohepten-5-ylidene)-1-piperidinyl]ethyl]-N'-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 153510-20-4 HCAPLUS

CN Urea, N-[2-[4-(5H-dibenzo[a,d]cyclohepten-5-ylidene)-1-piperidinyl]ethyl]-N'-phenyl- (9CI) (CA INDEX NAME)



L12 ANSWER 31 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1990:611850 HCAPLUS

DOCUMENT NUMBER: 113:211850

TITLE: Preparation of 4-(dibenzocycloheptenylydene)piperidine  
s and analogs as antihypertensives

INVENTOR(S): Syoji, Masataka; Domoto, Hideki; Toyota, Kozo;  
Yoshimoto, Ryota; Eguchi, Chikahiko; Kamimura, Akira

PATENT ASSIGNEE(S): Ajinomoto Co., Inc., Japan

SOURCE: Eur. Pat. Appl., 35 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 371805	A2	19900606	EP 1989-312488	19891130
EP 371805	A3	19910731		
EP 371805	B1	19960626		
R: CH, DE, FR, GB, IT, LI				
CA 2004211	AA	19900531	CA 1989-2004211	19891129
JP 03047168	A2	19910228	JP 1989-311718	19891130
PRIORITY APPLN. INFO.:			JP 1988-303461	A 19881130
			JP 1989-64059	A 19890316

OTHER SOURCE(S): MARPAT 113:211850

GI For diagram(s), see printed CA Issue.

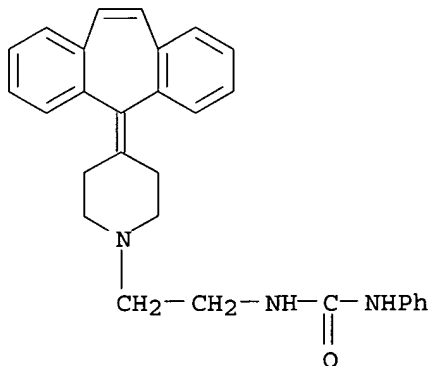
AB The title compds. [I; A = an (un)substituted aromatic or heterocyclic ring; R1R2 = atoms to complete an (un)substituted benzene ring; X = alkyl, aralkyl-, aryl-, cycloalkyl-, heterocyclyl-containing group, etc.; Y = heteroatom, (hetero)alkylene, alkenylene] were prepared Thus, title compound II (X = H) was refluxed overnight with Me(CH<sub>2</sub>)<sub>5</sub>Br in MeCOCH<sub>2</sub>CHMe<sub>2</sub> containing NaI and K<sub>2</sub>CO<sub>3</sub> to give, after acidification II.HCl (X = hexyl). II.HCl [X = Ph(CH<sub>2</sub>)<sub>4</sub>] lowered blood pressure 136 mm Hg in rats 4 h after receiving 10 mg/kg i.v.

IT 130374-95-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of, as antihypertensive)

RN 130374-95-7 HCAPLUS

CN Urea, N-[2-[4-(5H-dibenzo[a,d]cyclohepten-5-ylidene)-1-piperidinyl]ethyl]-N'-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

L12 ANSWER 32 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1990:611849 HCAPLUS

DOCUMENT NUMBER: 113:211849

TITLE: Arylalkylpiperidines and -piperazines as antihypertensives

INVENTOR(S): Syoji, Masataka; Toyota, Kozo; Eguchi, Chikahiko; Domoto, Hideki; Yoshimoto, Ryota; Kamimura, Akira

PATENT ASSIGNEE(S): Ajinomoto Co., Inc., Japan

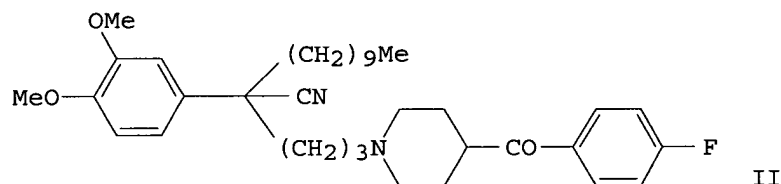
SOURCE: Eur. Pat. Appl., 59 pp.



DOCUMENT TYPE: CODEN: EPXXDW  
 LANGUAGE: Patent  
 FAMILY ACC. NUM. COUNT: English  
 PATENT INFORMATION: 4

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 370712	A2	19900530	EP 1989-311961	19891117
EP 370712	A3	19911002		
R: CH, DE, FR, GB, IT, LI				
JP 02262541	A2	19901025	JP 1989-26232	19890203
PRIORITY APPLN. INFO.:			JP 1988-293408	A 19881118
			JP 1988-303461	A 19881130
			JP 1989-26232	A 19890203
			JP 1989-64059	A 19890316

OTHER SOURCE(S): MARPAT 113:211849  
 GI

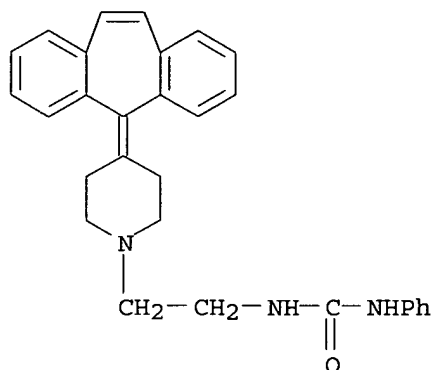


AB OXCH<sub>2</sub>CH<sub>2</sub>N(Z)CH<sub>2</sub>CH<sub>2</sub>YW[I; Q = PhO, 4-F<sub>3</sub>CC<sub>6</sub>H<sub>4</sub>, 2-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>, 2-H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>, 2-EtO<sub>2</sub>CNHC<sub>6</sub>H<sub>4</sub>, naphthyl, etc.; X = (substituted) (heteroatom-interrupted) alkylene, alkenylene; Z = Me; W = H; ZW = CH<sub>2</sub>CH<sub>2</sub>; Y = PhCOCH, 4-FC<sub>6</sub>H<sub>4</sub>COCH, 4-FC<sub>6</sub>H<sub>4</sub>CON, PhN, 4-FC<sub>6</sub>H<sub>4</sub> CH:C Ph<sub>2</sub>CHN, 4-FC<sub>6</sub>H<sub>4</sub> SO<sub>2</sub>N, etc.], were prepared Thus, 3,4-(MeO)<sub>2</sub>C<sub>6</sub>H<sub>3</sub>CH<sub>2</sub>CN in dimethoxyethane (DME) was added dropwise to NaNH<sub>2</sub> in DME at room temp; the mixture was then stirred at 50° for 1 h and Br(CH<sub>2</sub>)<sub>9</sub>Me in DME was added at room temperature The mixture was stirred in 1 h at room temperature and 2 h at 50°, cooled, treated with NaNH<sub>2</sub>, stirred 2 h at 50°, cooled, treated with Br(CH<sub>2</sub>)<sub>3</sub>Cl in DME, stirred 1 h at room temperature and 2 h at 50° to give 3,4-(MeO)<sub>2</sub>C<sub>6</sub>H<sub>3</sub>C[(CH<sub>2</sub>)<sub>9</sub>Me][(CH<sub>2</sub>)<sub>3</sub>Cl]CN. The latter was refluxed with 4-(4-fluorobenzoyl)piperidine.HCl, K<sub>2</sub>CO<sub>3</sub>, and NaI in MeCOCH<sub>2</sub>CHMe<sub>2</sub> overnight to give II. I at 10 mg/kg i.v. in rats reduced blood pressure by up to 135 mm Hg 30 min after administration.

IT **130374-95-7P**  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of, as antihypertensive)

RN 130374-95-7 HCAPLUS

CN Urea, N-[2-[4-(5H-dibenzo[a,d]cyclohepten-5-ylidene)-1-piperidinyl]ethyl]-N'-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)

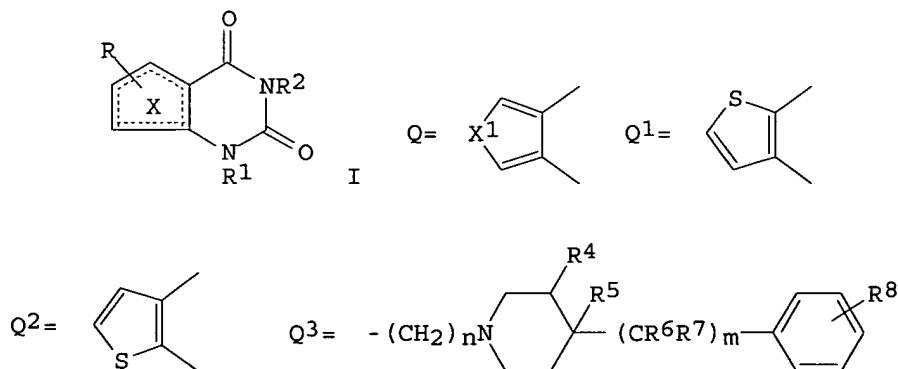


● HCl

L12 ANSWER 33 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1989:574121 HCAPLUS  
 DOCUMENT NUMBER: 111:174121  
 TITLE: Preparation of 3-(piperidinoalkyl)thieno- and  
 furopyrimidine-2,4-diones as serotonin antagonists and  
 alpha adrenergic blocking agents  
 INVENTOR(S): Press, Jeffery B.; Russell, Ronald K.  
 PATENT ASSIGNEE(S): Ortho Pharmaceutical Corp., USA  
 SOURCE: U.S., 13 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4835157	A	19890530	US 1988-168199	19880315
PRIORITY APPLN. INFO.:			US 1988-168199	19880315
OTHER SOURCE(S):	CASREACT 111:174121; MARPAT 111:174121			

GI

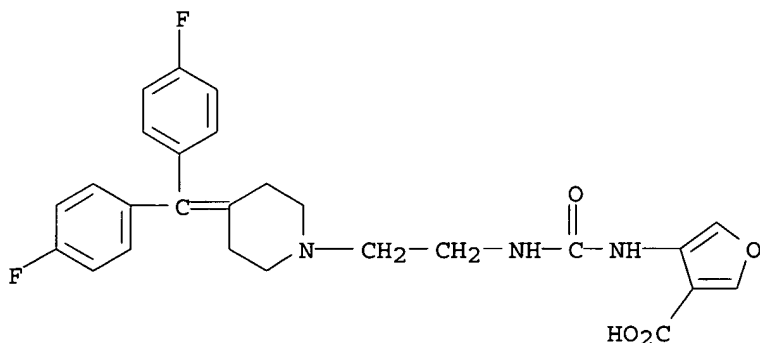


AB The title compds. [I; ring X = Q - Q2; X1 = S; O, R = H, C1-3 alkyl, Cl, Br, NO2; R1 = H, C1-6 alkyl, branched-chain C3-6 alkyl, C3-6 alkenyl, C3-6 alkynyl, COR3; R2 = Q3; R3 = C1-6 alkyl, (un)substituted Ph; R4 = H; or R4R5, R5R6 = double bond; R6R5 = double bond or R6R7 = O; R7 = (un)substituted Ph or R7R6 = O; R8 = H, Cl, Br, F, CF3, C1-6 alkyl, C1-3 alkoxy; m = 0, 1; n = 2-6; with provisos that when ring X = Q2, R ≠ C1-3 alkyl; when R4 = R5 = H, R6R7 = O and m = 1, when R4 = H, R5R6 = double bond, R7 = (un)substituted, and m = 1], useful as cardiovascular agents and antihypertensives, were prepared A mixture of N-(3-carboethoxythien-2-yl)-N-(2-chloroethyle)urea, 4-(4-fluorobenzoyl)piperidine hydrochloride, NaHCO3, and NaI in THF was refluxed 4 days to give 70% N-(3-carboethoxythien-2-yl)-N-[2-[4-(4-fluorobenzoyl)piperidin-1-yl]ethyl]urea which was stirred at room temperature with 50% NaOH in MeOH to give 78% 3-[2-[4-(4-fluorobenzoyl)piperidin-1-yl]ethyl]thieno[2,3-d]pyrimidine-2,4-dione (II). II antagonized serotonin-induced pressor response in spontaneously hypertensive rats with an ED50 value of 0.016 mg/kg vs. 0.013 and 0.008 mg/kg for ketanserin and ritanserin.

IT **123195-47-1P**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, as intermediate for cardiovascular agents and antihypertensives)

RN 123195-47-1 HCAPLUS

CN 3-Furancarboxylic acid, 4-[[[2-[4-[bis(4-fluorophenyl)methylene]-1-piperidinyl]ethyl]amino]carbonyl]amino]- (9CI) (CA INDEX NAME)



L12 ANSWER 34 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1987:138471 HCAPLUS

DOCUMENT NUMBER: 106:138471

TITLE: Anti-anaphylactic and antibronchospastic  
 N-benzhydryldiazacycloalkylalkanilides

INVENTOR(S): Nardi, Dante; Leonardi, Amedeo; Motta, Gianni;  
 Cazzulani, Pietro

PATENT ASSIGNEE(S): Recordati S. A. Chemical and Pharmaceutical Co.,  
 Switz.

SOURCE: Eur. Pat. Appl., 11 pp.  
 CODEN: EPXXDW

DOCUMENT TYPE: Patent

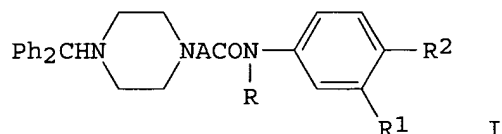
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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EP 207901	A1	19870107	EP 1986-830172	19860619
EP 207901	B1	19901128		
R: AT, BE, CH, DE, FR, GB, LI, LU, NL, SE				
IL 78804	A1	19911215	IL 1986-78804	19860516
ZA 8603754	A	19870128	ZA 1986-3754	19860520
FI 8602204	A	19861221	FI 1986-2204	19860526
CA 1269980	A1	19900605	CA 1986-510539	19860602
US 4675319	A	19870623	US 1986-871858	19860609
JP 61293977	A2	19861224	JP 1986-137260	19860612
ES 556145	A1	19871001	ES 1986-556145	19860617
NO 8602427	A	19861222	NO 1986-2427	19860618
NO 163816	B	19900417		
NO 163816	C	19900725		
AU 8658828	A1	19861224	AU 1986-58828	19860619
AU 592348	B2	19900111		
CN 86105641	A	19870401	CN 1986-105641	19860619
CN 1011784	B	19910227		
HU 43837	A2	19871228	HU 1986-2581	19860619
HU 198033	B	19890728		
AT 58729	E	19901215	AT 1986-830172	19860619
DK 8602911	A	19861221	DK 1986-2911	19860620
PRIORITY APPLN. INFO.:			IT 1985-21225	A 19850620
OTHER SOURCE(S):			EP 1986-830172	A 19860619
MARPAT 106:138471				
GI				

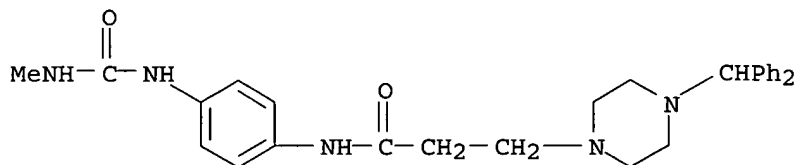


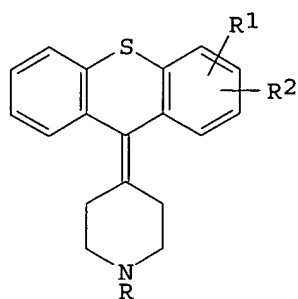
AB Title compds. I [R = H, alkyl; R1, R2 = H, (di) (alkyl)- or (bis) (hydroxyalkyl) amino, morpholino, piperidino, N-alkylpiperazino, 1,3-dithiolan-2-ylideneamino, N-alkylureido; A = alkylene] are prepared as antianaphylactic and antibronchospastic agents. A mixture of 19 g CH2:CHCONMeC6H4NO2-3 and 23 g N-benzhydrylpiperazine in PhMe was refluxed for 3 h to give, after workup and acidification, 17.2 g I.HCl (R = Me, R1 = NO2, R2 = H, A = CH2CH2) (II). Redn. of 15.6 g II with SnCl2 in EtOH at 70° gave 10.2 g I (R = Me, R1 = NH2, R2 = H, A = CH2CH2), which had an ED50 of 0.010 mmol/kg in the homologous antibody-induced passive cutaneous anaphylaxis test in rats.

IT **107314-45-4P 107314-66-9P**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, as antianaphylactic and antibronchospastic)

RN 107314-45-4 HCAPLUS

CN 1-Piperazinepropanamide, 4-(diphenylmethyl)-N-[4-  
 [(methyamino)carbonyl]amino]phenyl]- (9CI) (CA INDEX NAME)





I

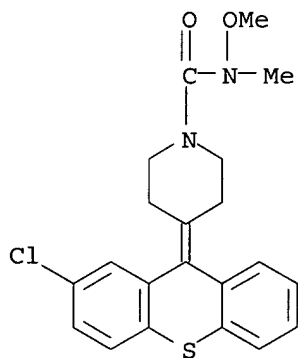
AB The thioxanthenylidenepiperidines I (R = H, alkyl, alkenyl, alkynyl, CN, etc.; R1,R2 = H, halo, alkyl, etc.) are prepared as acaricides, insecticides, and fungicides. Thus, 4-(2-chlorothioxanthen-9-ylidene)piperidine was refluxed with NaH in THF for 22 h, followed by the addition of EtI and refluxing for 24 h to give I (R = Et, R1 = 2-Cl, R2 = H) (II). *Lucilia sericata* Reared on a medium containing 0.1% II showed 80-100% mortality.

IT 102905-87-3P 102905-96-4P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, as pesticides)

RN 102905-87-3 HCAPLUS

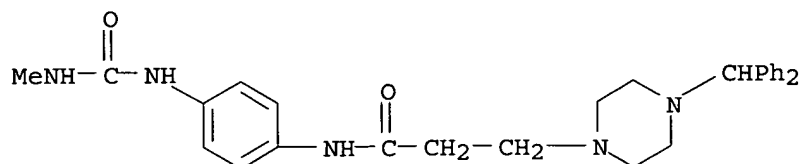
CN 1-Piperidinecarboxamide, 4-(2-chloro-9H-thioxanthen-9-ylidene)-N-methoxy-N-methyl- (9CI) (CA INDEX NAME)



RN 102905-96-4 HCAPLUS

CN 1-Piperidinecarboxamide, N-methoxy-N-methyl-4-(9H-thioxanthen-9-ylidene)- (9CI) (CA INDEX NAME)

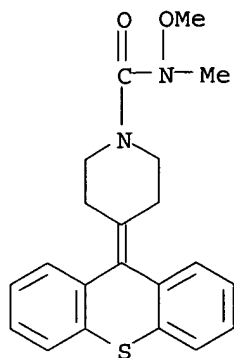
RN 107314-66-9 HCAPLUS  
 CN 1-Piperazinepropanamide, 4-(diphenylmethyl)-N-[4-  
 [[(methylamino)carbonyl]amino]phenyl]-, hydrochloride (9CI) (CA INDEX  
 NAME)



●x HCl

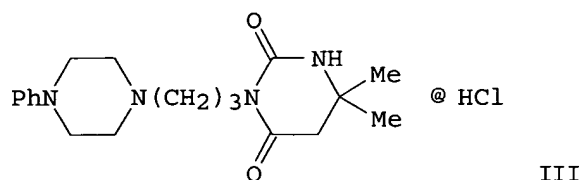
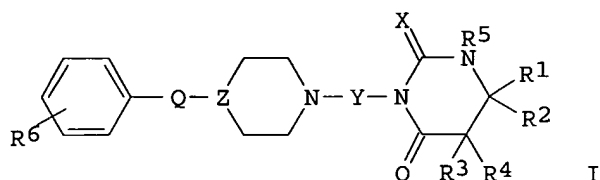
L12 ANSWER 35 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1986:420530 HCAPLUS  
 DOCUMENT NUMBER: 105:20530  
 TITLE: Thioxanthenes used as pesticides  
 INVENTOR(S): Traber, Walter; Fischer, Hanspeter  
 PATENT ASSIGNEE(S): Ciba-Geigy A.-G. , Switz.  
 SOURCE: Eur. Pat. Appl., 33 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 179020	A2	19860423	EP 1985-810466	19851014
EP 179020	A3	19870325		
R: BE, CH, DE, FR, GB, IT, LI, NL				
US 4777177	A	19881011	US 1985-786380	19851010
BR 8505222	A	19860729	BR 1985-5222	19851018
JP 61106573	A2	19860524	JP 1985-234387	19851019
PRIORITY APPLN. INFO.:			CH 1984-5010	A 19841019
			CH 1984-5011	A 19841019
			CH 1985-3830	A 19850905
OTHER SOURCE(S):		MARPAT 105:20530		
GI				



L12 ANSWER 36 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1979:186989 HCAPLUS  
 DOCUMENT NUMBER: 90:186989  
 TITLE: Hexahydropyrimidines  
 INVENTOR(S): Weber, Rolf Ortwin; Anagnostopulos, Hiristo; Gebert, Ulrich  
 PATENT ASSIGNEE(S): Hoechst A.-G., Fed. Rep. Ger.  
 SOURCE: Ger. Offen., 28 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2727469	A1	19781221	DE 1977-2727469	19770618
CA 1085396	A1	19800909	CA 1978-304474	19780531
AU 7836788	A1	19791206	AU 1978-36788	19780601
ES 470727	A1	19790116	ES 1978-470727	19780613
EP 220	A1	19790110	EP 1978-200041	19780614
EP 220	B1	19810429		
R: BE, CH, DE, FR, GB, LU, NL, SE				
US 4216216	A	19800805	US 1978-915899	19780615
DK 7802727	A	19781219	DK 1978-2727	19780616
NO 7802108	A	19781219	NO 1978-2108	19780616
ZA 7803465	A	19790725	ZA 1978-3465	19780616
AT 7804412	A	19800215	AT 1978-4412	19780616
AT 358597	B	19800925		
JP 54009287	A2	19790124	JP 1978-72743	19780617
JP 56006420	B4	19810210		
PRIORITY APPLN. INFO.: GI			DE 1977-2727469	A 19770618



AB The hexahydropyrimidines I (R1 = H, C1-2 alkyl, Ph, MeC6H4; R2 - R5 = H, C1-2 alkyl, R6 = H, benzo, C1-2 alkoxy, halo, haloalkyl, NO2, OH; Q = PhCH, bond; X = O, S; Y = alkylene, hydroxyalkylene; Z = N, methine group) were prepared. Thus, 1-phenyl-4-(3-aminopropyl)piperazine was treated with OCNCMe2CH2CO2Me to give the urea derivative II which was cyclized to give the pyrimidine III. The serotonin antagonist ED50 of III (i.v. rat) was 3 - 10 µg/kg. At 1 + 10<sup>-5</sup> g/mL III was a thrombocyte aggregation inhibitor.

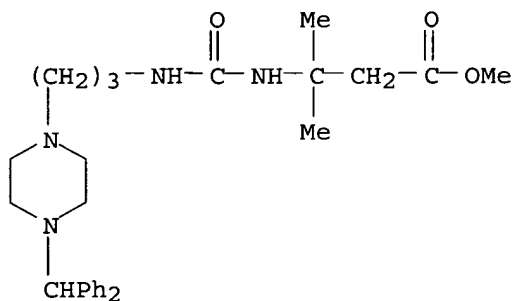
IT **69950-10-3P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and cyclization of, uracil derivative from)

RN 69950-10-3 HCAPLUS

CN Butanoic acid, 3-[[[3-[4-(diphenylmethyl)-1-piperazinyl]propyl]amino]carbonyl]amino]-3-methyl-, methyl ester (9CI) (CA INDEX NAME)



L12 ANSWER 37 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1978:22917 HCAPLUS  
 DOCUMENT NUMBER: 88:22917  
 TITLE: Acetohydroxamic acids  
 INVENTOR(S): Lafon, Louis  
 PATENT ASSIGNEE(S): Laboratoire L. Lafon S. A., Fr.  
 SOURCE: Ger. Offen., 105 pp.

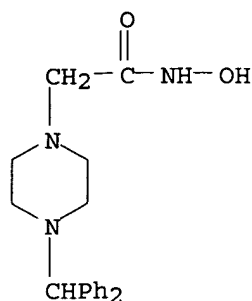


DOCUMENT TYPE: CODEN: GWXXBX  
 LANGUAGE: Patent  
 FAMILY ACC. NUM. COUNT: 3 German  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2711451	A1	19771006	DE 1977-2711451	19770316
DE 2711451	C2	19900510		
GB 1574822	A	19800910	GB 1976-11710	19760323
FR 2345430	A1	19771021	FR 1977-6997	19770309
FR 2345430	B1	19820723		
ZA 7701584	A	19780726	ZA 1977-1584	19770316
AU 7723344	A1	19780921	AU 1977-23344	19770317
AU 516473	B2	19810604		
US 4122186	A	19781024	US 1977-778543	19770317
FI 7700859	A	19770924	FI 1977-859	19770318
FI 62821	B	19821130		
FI 62821	C	19830310		
AT 7701930	A	19790915	AT 1977-1930	19770321
AT 356078	B	19800410		
CH 620894	A	19801231	CH 1977-3479	19770321
IL 51705	A1	19820930	IL 1977-51705	19770321
BE 852738	A1	19770922	BE 1977-175998	19770322
DK 7701266	A	19770924	DK 1977-1266	19770322
DK 171197	B1	19960722		
SE 7703263	A	19770924	SE 1977-3263	19770322
SE 432420	B	19840402		
SE 432420	C	19840712		
NO 7701006	A	19770926	NO 1977-1006	19770322
NO 144420	B	19810518		
NO 144420	C	19810826		
HU 172677	B	19771128	HU 1977-LA912	19770322
ES 457105	A1	19781016	ES 1977-457105	19770322
CS 200511	P	19800915	CS 1977-1904	19770322
NL 7703168	A	19770927	NL 1977-3168	19770323
NL 188801	B	19920506		
NL 188801	C	19921001		
JP 52144601	A2	19771202	JP 1977-32011	19770323
JP 62008424	B4	19870223		
DD 129645	C	19780201	DD 1977-198023	19770323
SU 689617	D	19790930	SU 1977-2465454	19770323
PL 113772	B1	19801231	PL 1977-198229	19770519
BE 863947	A4	19780529	BE 1978-185158	19780214
US 4151300	A	19790424	US 1978-930927	19780804
US 4152458	A	19790501	US 1978-930926	19780804
US 4183951	A	19800115	US 1978-930925	19780804
US 4209523	A	19800624	US 1978-930924	19780804
US 4209524	A	19800624	US 1978-930928	19780804
AT 7808399	A	19800215	AT 1978-8399	19781124
AT 358556	B	19800925		
AT 7808398	A	19800915	AT 1978-8398	19781124
AT 361932	B	19810410		
AT 362793	B	19810610	AT 1978-8400	19781124
AT 7808400	A	19801115		
US 4225617	A	19800930	US 1979-69254	19790824
US 4325964	A	19820420	US 1979-107609	19791227
FR 2453148	A1	19801031	FR 1980-5644	19800313
FR 2453148	B1	19831202		

Pryor 10\_637163

FR 2453133	A1	19801031	FR 1980-5645	19800313
FR 2453133	B1	19840406		
FR 2453158	A1	19801031	FR 1980-5646	19800313
FR 2453158	B1	19820806		
AT 8005014	A	19830815	AT 1980-5014	19801009
AT 374191	B	19840326		
NO 8003336	A	19770926	NO 1980-3336	19801106
NO 146431	B	19820621		
NO 146431	C	19820929		
NO 8003337	A	19770926	NO 1980-3337	19801106
NO 152972	B	19850916		
NO 152972	C	19851227		
NO 8003338	A	19770926	NO 1980-3338	19801106
NO 145881	B	19820308		
NO 145881	C	19820616		
FI 8201213	A	19820406	FI 1982-1213	19820406
FI 65236	B	19831230		
FI 65236	C	19840410		
FI 8201214	A	19820406	FI 1982-1214	19820406
FI 69624	B	19851129		
FI 69624	C	19860310		
FI 8201215	A	19820406	FI 1982-1215	19820406
FI 71313	B	19860909		
FI 71313	C	19861219		
SE 8302171	A	19830419	SE 1983-2171	19830419
SE 452155	B	19871116		
SE 452155	C	19880225		
SE 8302172	A	19830419	SE 1983-2172	19830419
SE 458605	B	19890417		
SE 458605	C	19890810		
SE 8302173	A	19830419	SE 1983-2173	19830419
SE 456992	B	19881121		
SE 456992	C	19890316		
PRIORITY APPLN. INFO.:			GB 1976-11710	A 19760323
			GB 1977-6298	A 19770215
			US 1977-778543	A3 19770317
			FI 1977-859	A 19770318
			AT 1977-1930	A 19770321
			GB 1977-16705	A 19770421
			US 1978-877963	A1 19780215
			US 1978-930925	A3 19780804
AB	Psychotropic RCONHOH (R = e.g. C <sub>Bu</sub> 3, 5,5-diphenylhydantoinylmethyl, CH <sub>2</sub> CONPh <sub>2</sub> , CH <sub>2</sub> NHCOCHPh <sub>2</sub> , CH <sub>2</sub> SOCH <sub>2</sub> C <sub>6</sub> H <sub>4</sub> Cl-4, phenothiazinylethyl, 1-phenyl-2-benzimidazolylmethyl, CH <sub>2</sub> NHC <sub>6</sub> H <sub>3</sub> Cl <sub>2</sub> -3,4, CH <sub>2</sub> NHCONHC <sub>6</sub> H <sub>4</sub> Cl-4) (38 compds.) were prepared. Thus, Bu <sub>3</sub> CCO <sub>2</sub> H was chlorinated and treated with NH <sub>2</sub> OH.HCl to give 48% Bu <sub>3</sub> CCONHOH, which had tranquilizing activity in mice. Ph <sub>2</sub> NCOCH <sub>2</sub> CONHOH, at 100 mg/kg in 2 doses 2 h apart in rats, also lowered arterial blood pressure 10% and decreased heart frequency 8%.			
IT	<b>65083-33-2P</b>			
	RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)			
RN	65083-33-2 HCAPLUS			
CN	1-Piperazineacetamide, 4-(diphenylmethyl)-N-hydroxy- (9CI) (CA INDEX NAME)			



L12 ANSWER 38 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1968:506666 HCAPLUS

DOCUMENT NUMBER: 69:106666

TITLE: Synthesis of 1,4-disubstituted piperazines. II

AUTHOR(S): Verderame, Matthew

CORPORATE SOURCE: Albany Coll. of Pharm., Union Univ., Albany, NY, USA

SOURCE: Journal of Medicinal Chemistry (1968), 11(5), 1090-2

CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 69:106666

GI For diagram(s), see printed CA Issue.

AB Monosubstituted piperazines are treated with alkyl halides and acid halides to give I, where R is H or an alkyl or aralkyl group, and R1 is a carbamoyl, carbamoylmethyl, or aralkyl group. 1-Benzhydryl-4-(2,3-dihydroxypropyl)piperazine protects mice against electroshock, and the following I (R and R1 given): Ph2CH CH2CBr:CH2; Ph2CH, CH2CONHCONHMe; Ph2CH, CHMeCONHCONHMe; are mild psychomotor stimulants in mice.

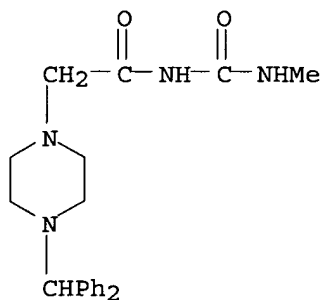
IT 18472-12-3P 18472-13-4P 18472-14-5P

18472-15-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(preparation and biol. activity of)

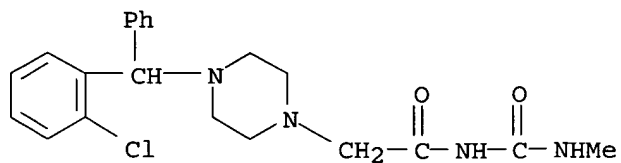
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CN 1-Piperazineacetamide, 4-(diphenylmethyl)-N-[(methyamino)carbonyl]- (9CI)  
(CA INDEX NAME)



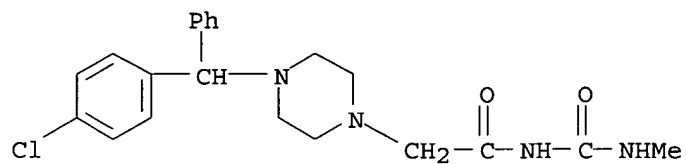
RN 18472-13-4 HCAPLUS

CN 1-Piperazineacetamide, 4-[(2-chlorophenyl)phenylmethyl]-N-[(methyamino)carbonyl]- (9CI) (CA INDEX NAME)



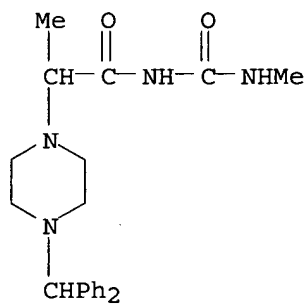
RN 18472-14-5 HCAPLUS

CN 1-Piperazineacetamide, 4-[(4-chlorophenyl)phenylmethyl]-N-[(methylamino)carbonyl]- (9CI) (CA INDEX NAME)

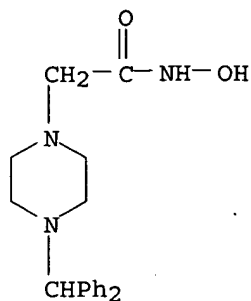


RN 18472-15-6 HCAPLUS

CN 1-Piperazineacetamide, 4-(diphenylmethyl)-alpha-methyl-N-[(methylamino)carbonyl]- (9CI) (CA INDEX NAME)



=>



L12 ANSWER 38 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1968:506666 HCAPLUS

DOCUMENT NUMBER: 69:106666

TITLE: Synthesis of 1,4-disubstituted piperazines. II

AUTHOR(S): Verderame, Matthew

CORPORATE SOURCE: Albany Coll. of Pharm., Union Univ., Albany, NY, USA

SOURCE: Journal of Medicinal Chemistry (1968), 11(5), 1090-2  
CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 69:106666

GI For diagram(s), see printed CA Issue.

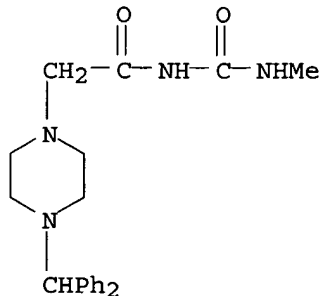
AB Monosubstituted piperazines are treated with alkyl halides and acid halides to give I, where R is H or an alkyl or aralkyl group, and R1 is a carbamoyl, carbamoylmethyl, or aralkyl group. 1-Benzhydryl-4-(2,3-dihydroxypropyl)piperazine protects mice against electroshock, and the following I (R and R1 given): Ph2CH CH2CBr:CH2; Ph2CH, CH2CONHCONHMe; Ph2CH, CHMeCONHCONHMe; are mild psychomotor stimulants in mice.

IT 18472-12-3P 18472-13-4P 18472-14-5P  
18472-15-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(preparation and biol. activity of)

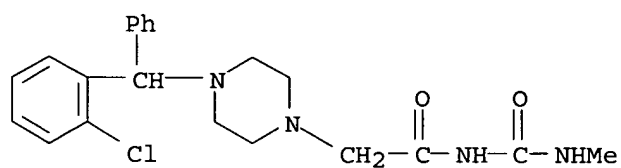
RN 18472-12-3 HCAPLUS

CN 1-Piperazineacetamide, 4-(diphenylmethyl)-N-[(methylamino)carbonyl]- (9CI)  
(CA INDEX NAME)



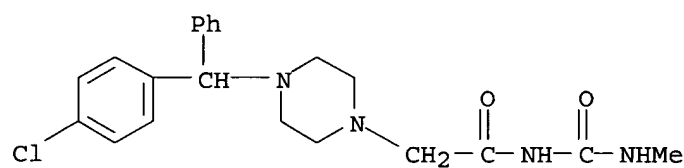
RN 18472-13-4 HCAPLUS

CN 1-Piperazineacetamide, 4-[(2-chlorophenyl)phenylmethyl]-N-[(methylamino)carbonyl]- (9CI) (CA INDEX NAME)



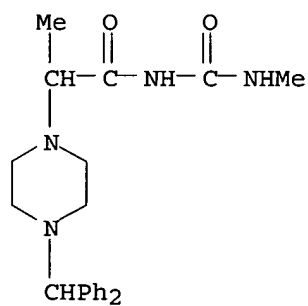
RN 18472-14-5 HCAPLUS

CN 1-Piperazineacetamide, 4-[(4-chlorophenyl)phenylmethyl]-N-[(methylamino)carbonyl]- (9CI) (CA INDEX NAME)



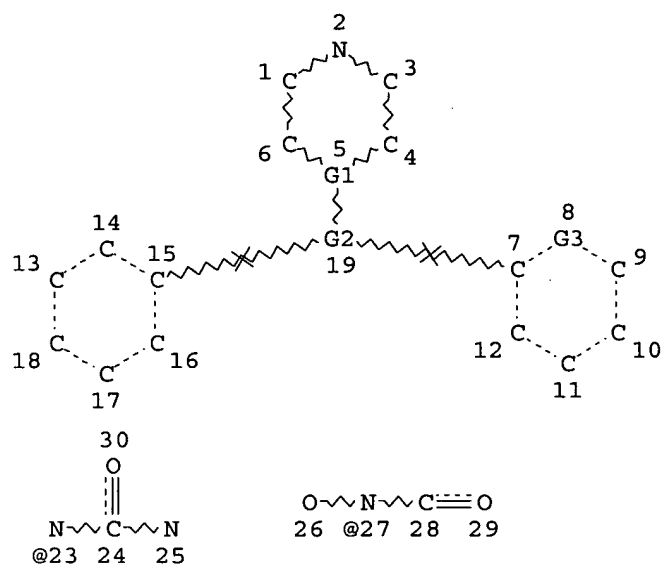
RN 18472-15-6 HCAPLUS

CN 1-Piperazineacetamide, 4-(diphenylmethyl)-alpha-methyl-N-[(methylamino)carbonyl]- (9CI) (CA INDEX NAME)



=> => d stat que 115

L2 STR

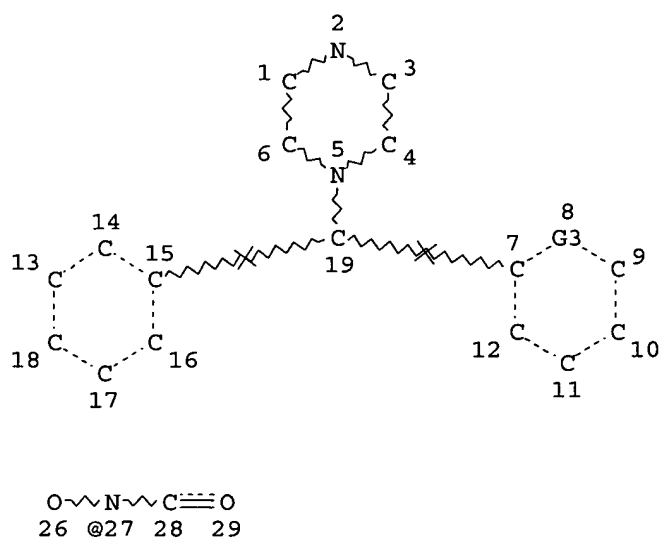


C @20    N @21    G4 22

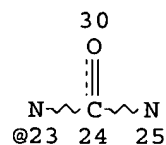
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 NSPEC    IS RC        AT    21  
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 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
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STEREO ATTRIBUTES: NONE  
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 L5            STR



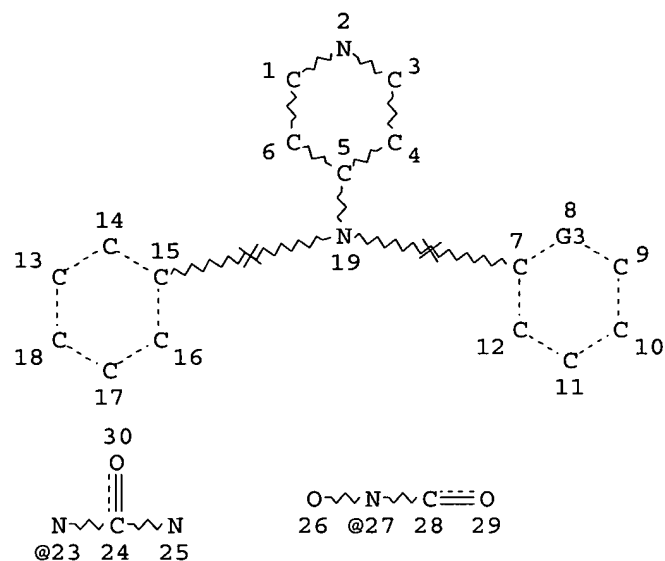
G4 22



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VAR G3=CH/N
VAR G4=23/27
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED
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GRAPH ATTRIBUTES:  
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NUMBER OF NODES IS 28

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STEREO ATTRIBUTES: NONE
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G4 22

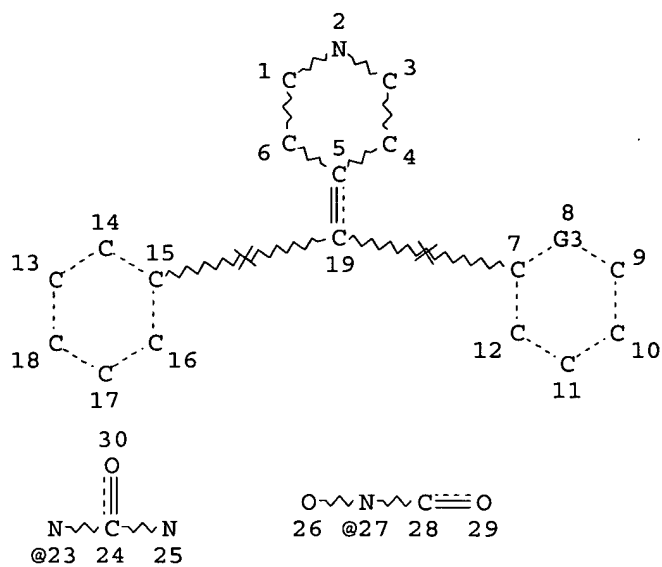
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VAR G4=23/27
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DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED
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GRAPH ATTRIBUTES:  
RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 28

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STEREO ATTRIBUTES: NONE
L7                      STR
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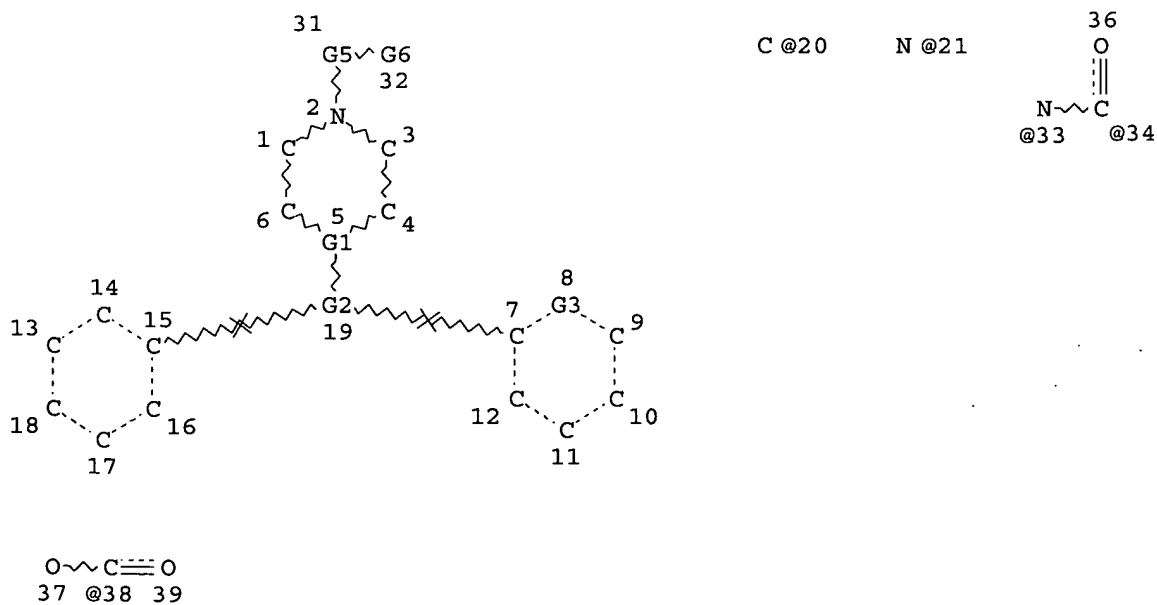
G4 22



VAR G3=CH/N  
 VAR G4=23/27  
 NODE ATTRIBUTES:  
 NSPEC IS RC AT 19  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 28

STEREO ATTRIBUTES: NONE  
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 L10 STR



VAR G1=C/N  
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 REP G5=(0-20) A  
 VAR G6=33/34/38  
 NODE ATTRIBUTES:  
 NSPEC IS RC AT 20  
 NSPEC IS RC AT 21  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 29

STEREO ATTRIBUTES: NONE

L11 561 SEA FILE=REGISTRY SUB=L9 SSS FUL L10  
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 L13 531 SEA FILE=REGISTRY ABB=ON PLU=ON L9 NOT L11  
 L14 36 SEA FILE=HCAPLUS ABB=ON PLU=ON L13  
 L15 31 SEA FILE=HCAPLUS ABB=ON PLU=ON L14 NOT L12

=>

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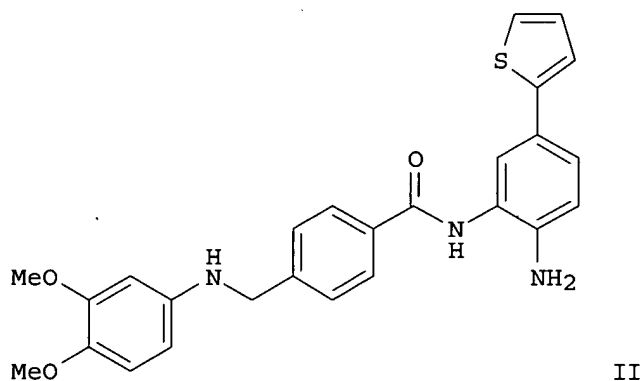
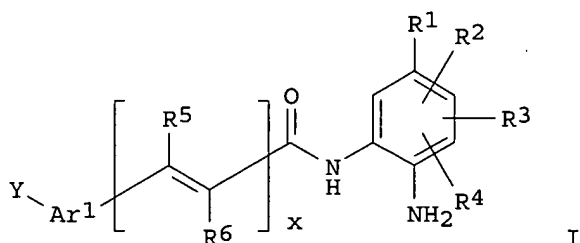
L15 ANSWER 1 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2005:300395 HCAPLUS  
 DOCUMENT NUMBER: 142:355054  
 TITLE: Preparation of amide derivatives as inhibitors of  
 histone deacetylase  
 INVENTOR(S): Moradei, Oscar; Paquin, Isabelle; Leit, Silvana;  
 Frechette, Sylvie; Vaisburg, Arkadii; Besterman,  
 Jeffrey M.; Tessier, Pierre; Mallais, Tammy C.  
 PATENT ASSIGNEE(S): Methylgene, Inc., Can.  
 SOURCE: PCT Int. Appl., 559 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005030705	A1	20050407	WO 2004-US31591	20040924
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

PRIORITY APPLN. INFO.: US 2003-505884P P 20030924  
 US 2003-532973P P 20031229

OTHER SOURCE(S) :  
GI

MARPAT 142:355054



AB Title compds. I [Ar1 = (un)saturated-, (un)substituted-mono or fused poly-cyclic hydrocarbyl optionally containing 1-4 heteroatoms per ring; R1 = (un)substituted-mono-, -bi-, -tri-cyclic-aryl or -heteroaryl; R2, R3, and R4 independently = H, halo, amino, etc.; R5 and R6 independently = H, alkyl, aryl, etc.; x = 0-1; Y = any pharmaceutically acceptable chemical moiety consisting of 1 to 50 atoms with provisions] and their pharmaceutically acceptable salts, are prepared and disclosed as inhibitors of histone deacetylase. Thus, e.g., II was prepared by Suzuki coupling of 2-bromo-2-nitro-phenylamine (preparation given) with 2-thiopheneboronic acid followed by carbonylation with 4-[3,4-dimethoxy-(phenylamino)-methyl]benzoic acid (preparation given) and subsequent reduction. The inhibitory

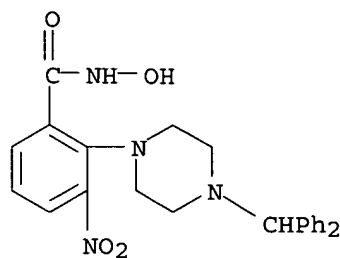
capability of I towards antiproliferative activity of histone deacetylase enzyme was evaluated using 3-[4,5-dimethylthiazol-2-yl]-2,5-diphenyltetrazolium] bromide (MTT) assay and it revealed that certain compds. of the invention had MTT IC 50 values in the range of below 1 up to 20  $\mu$ M. I as histone deacetylase inhibitors should prove useful in the treatment of diseases such as, but not limited to, cell proliferative disease, protozoal disease, and fungal disease.

IT 603986-61-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of amide derivs. as inhibitors of histone deacetylase)

RN 603986-61-4 HCAPLUS  
 CN Benzamide, 2-[4-(diphenylmethyl)-1-piperazinyl]-N-hydroxy-3-nitro- (9CI)  
 (CA INDEX NAME)



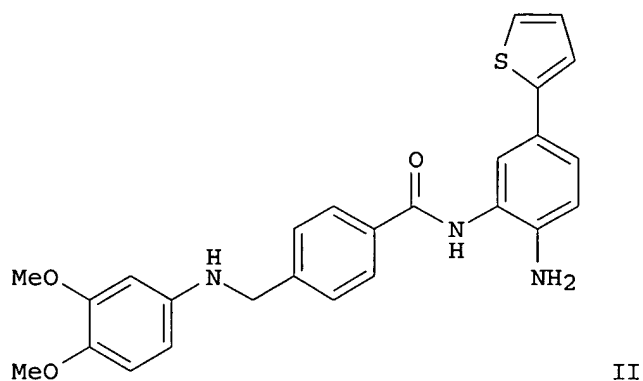
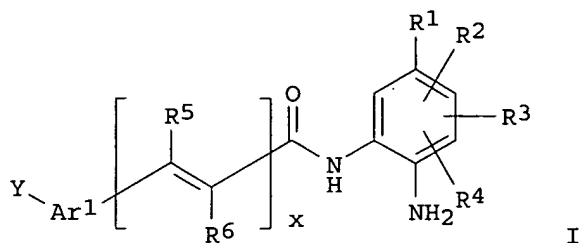
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 2 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2005:300394 HCAPLUS  
 DOCUMENT NUMBER: 142:373563  
 TITLE: Preparation of amide derivatives as inhibitors of histone deacetylase  
 INVENTOR(S): Moradei, Oscar; Paquin, Isabelle; Leit, Silvana; Frechette, Sylvie; Vaisburg, Arkadii; Besterman, Jeffrey M.; Tessier, Pierre; Mallais, Tammy C.  
 PATENT ASSIGNEE(S): Methylgene, Inc., Can.  
 SOURCE: PCT Int. Appl., 389 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005030704	A1	20050407	WO 2004-US31590	20040924
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

PRIORITY APPLN. INFO.: US 2003-505884P P 20030924  
 US 2003-532973P P 20031229  
 US 2004-561082P P 20040409

OTHER SOURCE(S): MARPAT 142:373563  
 GI



AB Title compds. I [Ar1 = (un)saturated-, (un)substituted-mono or fused poly-cyclic hydrocarbyl optionally containing 1-4 heteroatoms per ring; R1 = (un)substituted-mono-, -bi-, -tri-cyclic-aryl or -heteroaryl; R2, R3, and R4 independently = H, halo, amino, etc.; R5 and R6 independently = H, alkyl, aryl, etc.; x = 0-1; Y = any pharmaceutically acceptable chemical moiety consisting of 1 to 50 atoms with provisions] and their pharmaceutically acceptable salts, are prepared and disclosed as inhibitors of histone deacetylase. Thus, e.g., II was prepared by Suzuki coupling of 2-bromo-2-nitro-phenylamine (preparation given) with 2-thiopheneboronic acid followed by carbonylation with 4-[3,4-dimethoxy-(phenylamino)-methyl]benzoic acid (preparation given) and subsequent reduction. The

inhibitory capability of I towards antiproliferative activity of histone deacetylase enzyme was evaluated using 3-[4,5-dimethylthiazol-2-yl]-2,5-diphenyltetrazolium] bromide (MTT) assay and it revealed that certain compds. of the invention had MTT IC 50 values in the range of below 1 up to 20  $\mu$ M. I as histone deacetylase inhibitors should prove useful in the treatment of diseases such as, but not limited to, cell proliferative disease, protozoal disease, and fungal disease.

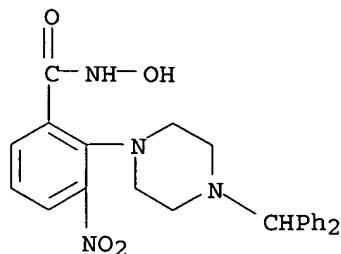
IT **603986-61-4P**

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of amide derivs. as inhibitors of histone deacetylase)

RN 603986-61-4 HCAPLUS

CN Benzamide, 2-[4-(diphenylmethyl)-1-piperazinyl]-N-hydroxy-3-nitro- (9CI)  
(CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 3 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2005:99177 HCAPLUS  
 DOCUMENT NUMBER: 142:197868  
 TITLE: Preparation of derivatives of 3-hydroxypyrrole-2,4-dicarboxylic acid as antitumor agents  
 INVENTOR(S): Cholody, Wieslaw M.; Petukhova, Valentina; O'Brien, Sean; Ohler, Norman; Pikul, Stanislaw  
 PATENT ASSIGNEE(S): USA  
 SOURCE: U.S. Pat. Appl. Publ., 46 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005026991	A1	20050203	US 2003-631887	20030731
WO 2005011675	A1	20050210	WO 2004-US24473	20040728
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: US 2003-631887 A 20030731  
 OTHER SOURCE(S): MARPAT 142:197868  
 GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The title compds. I or II [R1 = H, alkyl, heteroaryl, aryl, etc.; R2 = H, alkyl, alkenyl, alkynyl, etc.; R3 = alkyl, heteroaryl; R4 = H, alkyl, heteroaryl, aryl, etc.; R3 and R4 can be connected together to form a 4-7 membered heterocycle; R5 = H, alkyl, heteroaryl, etc.; X, Y = alkyl, alkenyl, alkynyl, etc.; a, b, c = 0-1; including pharmaceutically acceptable salts thereof] that modulate levels of gene expression in

cellular systems, including cancer cells (no data given), are disclosed, along with methods for preparing such agents, as well as pharmaceutical compns. containing such agents as active ingredients and methods of using these as therapeutic agents. E.g., a multi-step synthesis of III.TFA, starting from di-Et 3-hydroxy-1-methyl-1H-pyrrole-2,4-dicarboxylate, was given.

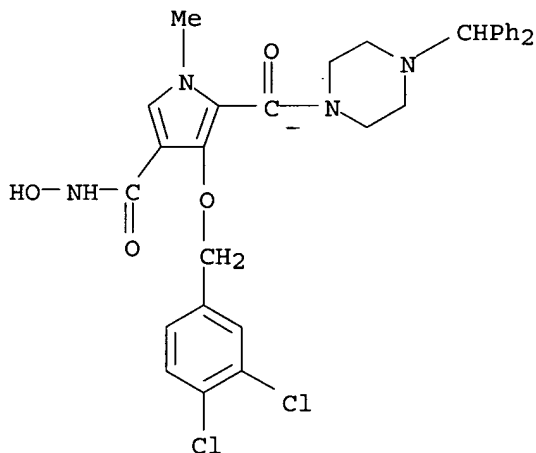
IT 837406-40-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of derivs. of 3-hydroxypyrrole-2,4-dicarboxylic acid as antitumor agents)

RN 837406-40-3 HCAPLUS

CN 1H-Pyrrole-3-carboxamide, 4-[(3,4-dichlorophenyl)methoxy]-5-[[4-(diphenylmethyl)-1-piperazinyl]carbonyl]-N-hydroxy-1-methyl- (9CI) (CA INDEX NAME)



L15 ANSWER 4 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:86449 HCAPLUS

DOCUMENT NUMBER: 142:336330

TITLE: 5-Lipoxygenase inhibition by N-hydroxycarbamates in dual-function compounds

AUTHOR(S): Lewis, Timothy A.; Bayless, Lynn; DiPesa, Alan J.; Eckman, Joseph B.; Gillard, Michel; Libertine, Lyn; Scannell, Ralph T.; Wypij, Donna M.; Young, Michelle A.

CORPORATE SOURCE: UCB Research, Cambridge, MA, 02139, USA

SOURCE: Bioorganic & Medicinal Chemistry Letters (2005), 15(4), 1083-1085

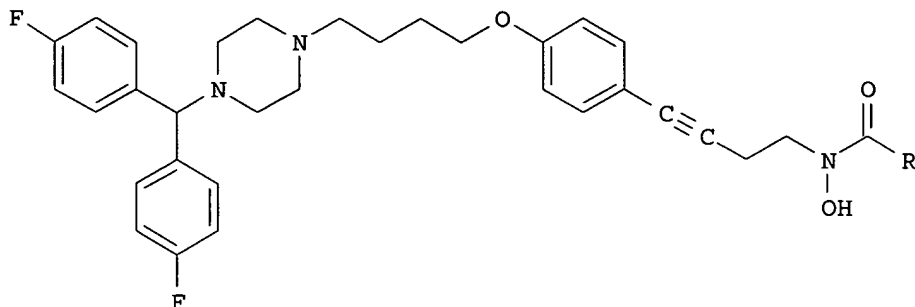
CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



AB A series of N-hydroxycarbamates I (R = H<sub>2</sub>N, MeO, EtO, Me<sub>2</sub>CHO, Me<sub>2</sub>CHCH<sub>2</sub>O, PhCH<sub>2</sub>O), containing a histaminergic H<sub>1</sub> receptor antagonist pharmacophore, was synthesized. In vitro assays determined that these compds. had both histaminergic binding and 5-lipoxygenase inhibiting activities comparable to the corresponding N-hydroxyurea analog. Animal models demonstrated antihistaminergic and the 5-lipoxygenase inhibitory activity, with the N-hydroxyurea analog I (R = H<sub>2</sub>N) having a better overall profile.

IT 299461-07-7P, UCB 62045 848470-24-6P  
848470-26-8P 848470-27-9P 848470-28-0P  
848470-29-1P

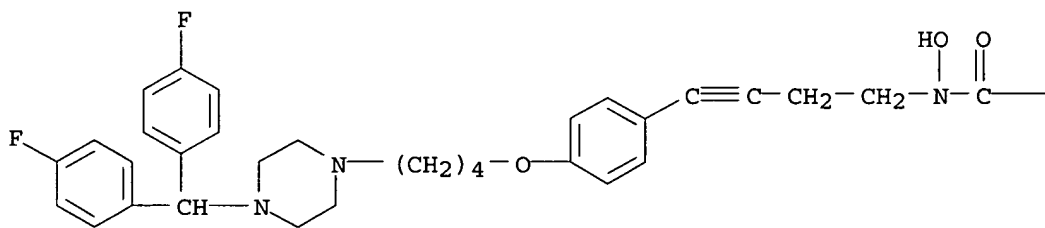
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation of (piperazinylalkoxy)phenylalkynyl-substituted N-hydroxycarbamates and N-hydroxyurea as dual-function antihistaminergic agents and 5-lipoxygenase inhibitors)

RN 299461-07-7 HCAPLUS

CN Urea, N-[4-[4-[4-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]butoxy]phenyl]-3-butynyl]-N-hydroxy- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

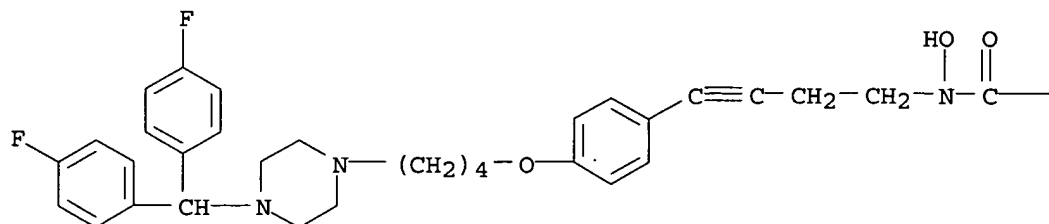
—NH<sub>2</sub>

RN 848470-24-6 HCAPLUS

CN Carbamic acid, [4-[4-[4-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]butoxy]phenyl]-3-butynyl]hydroxy-, ethyl ester (9CI) (CA INDEX NAME)



PAGE 1-A

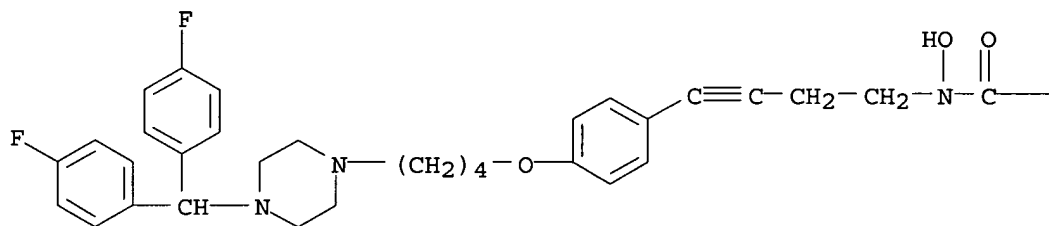


PAGE 1-B

— OEt

RN 848470-26-8 HCAPLUS  
 CN Carbamic acid, [4-[4-[4-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]butoxy]phenyl]-3-butynyl]hydroxy-, 1-methylethyl ester (9CI)  
 (CA INDEX NAME)

PAGE 1-A

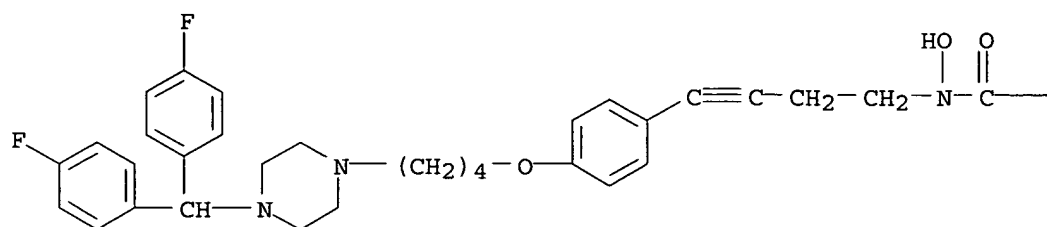


PAGE 1-B

— OPr-i

RN 848470-27-9 HCAPLUS  
 CN Carbamic acid, [4-[4-[4-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]butoxy]phenyl]-3-butynyl]hydroxy-, methyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

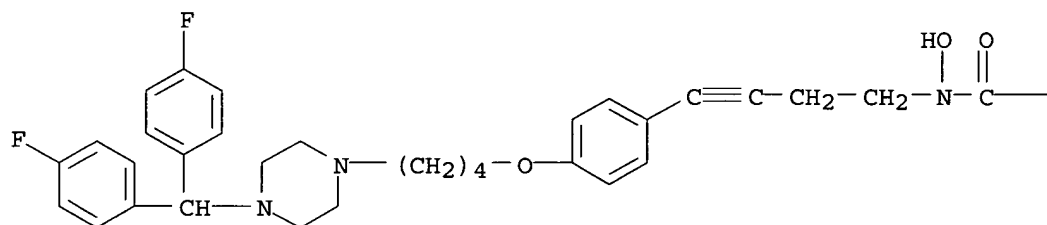


PAGE 1-B

— OMe

RN 848470-28-0 HCAPLUS  
 CN Carbamic acid, [4-[4-[4-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]butoxy]phenyl]-3-butynyl]hydroxy-, 2-methylpropyl ester (9CI)  
 (CA INDEX NAME)

PAGE 1-A

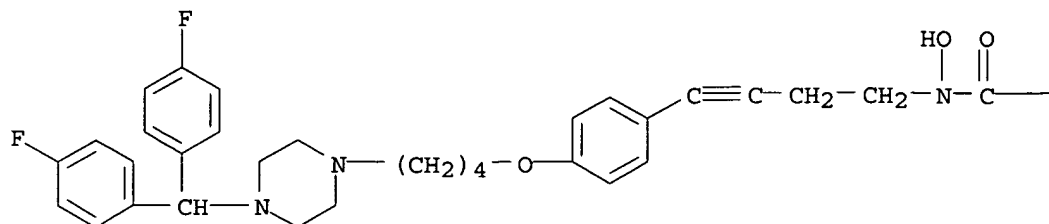


PAGE 1-B

— OBU-i

RN 848470-29-1 HCAPLUS  
 CN Carbamic acid, [4-[4-[4-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]butoxy]phenyl]-3-butynyl]hydroxy-, phenylmethyl ester (9CI)  
 (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

— O—CH<sub>2</sub>— Ph

IT 848470-25-7P

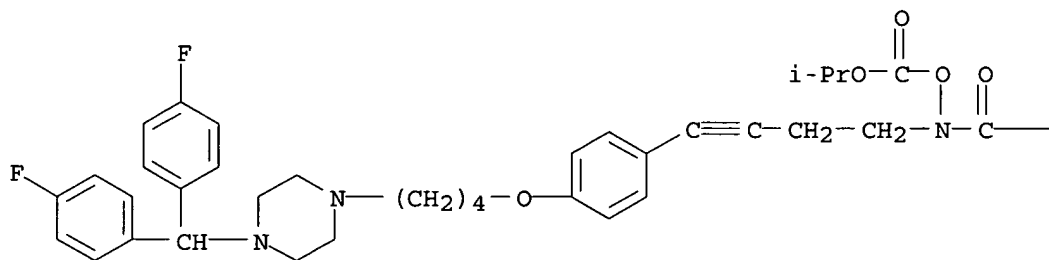
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of (piperazinylalkoxy)phenylalkynyl-substituted N-hydroxycarbamates and N-hydroxyurea as dual-function antihistaminergic agents and 5-lipoxygenase inhibitors)

RN 848470-25-7 HCAPLUS

CN Carbamic acid, [4-[4-[4-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]butoxy]phenyl]-3-butynyl] [(1-methylethoxy)carbonyl]oxy-, 1-methylethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

— OPr-i

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 5 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2004:1153108 HCAPLUS

DOCUMENT NUMBER: 142:127171  
 TITLE: The effect of a novel, dual function histamine H1 receptor antagonist/5-lipoxygenase enzyme inhibitor on in vivo dermal inflammation and extravasation  
 AUTHOR(S): Giannaras, Alexander; Selig, William; Ellis, James; Hullinger, Thomas  
 CORPORATE SOURCE: Pharmacology Department, UCB Research Inc., Cambridge, MA, 02139, USA  
 SOURCE: European Journal of Pharmacology (2005), 506(3), 265-271  
 CODEN: EJPHAZ; ISSN: 0014-2999  
 PUBLISHER: Elsevier B.V.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

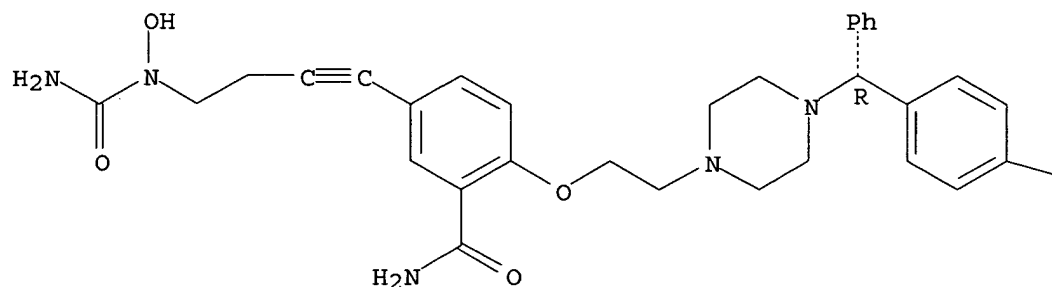
AB Leukotrienes and histamine are thought to play important roles in the development of dermatitis. This study evaluated the in vivo efficacy of 5-{4-[(aminocarbonyl)(hydroxy)amino]but-1-ynyl}-2-(2-{4-[(R)-(4-chlorophenyl)(phenyl)methyl]piperazin-1-yl}ethoxy)benzamide (ucb 35440), a dual function histamine H1 receptor antagonist/5-lipoxygenase enzyme inhibitor, in mouse skin. A single application of phorbol 12-myristate 13-acetate (PMA) was used to induce an acute inflammatory response over a 6-h period. PMA was applied on days 0, 2, 4, 7 and 9 to generate a chronic inflammatory response measured on day 10. ucb 35440 was applied topically at 1 h pre-PMA challenge and 3 h post-PMA challenge in the acute model. In the chronic PMA model, ucb 35440 was applied topically twice a day (AM and PM) on days 7, 8 and 9. Dose-response studies revealed that ucb 35440 inhibited PMA-induced ear weight gain with a 57% inhibition measured using a 3% w/v topical solution in the acute model. The compound appeared less potent in the chronic model with 43% inhibition measured using a 3% w/v topical solution of ucb 35440. Qual. histol. assessment in PMA challenged ears showed that ucb 35440 produced a moderate reduction of polymorphonuclear cell infiltration in the acute model whereas, a more substantial reduction in polymorphonuclear infiltration was noted in the chronic model. In addition, the oral efficacy of ucb 35440 was evaluated in vivo against histamine-induced extravasation in guinea pig skin. Single oral doses of ucb 35440 (10 mg/kg in 0.5% methylcellulose suspension) at 1, 2, 6 or 24 h pre-histamine challenge produced minimal inhibition of histamine-induced extravasation in the dermis. However, when ucb 35440 (10 mg/kg in a 0.5% methylcellulose suspension) was orally administered 24 and 2 h prior to dermal histamine challenge, significant inhibition of extravasation was observed. Similar inhibition of histamine-induced extravasation was observed when animals were orally dosed twice a day (AM and PM 10 mg/kg in a 0.5% methylcellulose suspension) for 5.5 days prior to dermal histamine challenge. Collectively, these results suggest that ucb 35440 may represent an important therapeutic class for the treatment of dermatol. inflammatory conditions.

IT 299460-62-1, UCB 35440  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (effect of a novel, dual function histamine H1 receptor antagonist/5-lipoxygenase enzyme inhibitor ucb 35440 on in vivo dermal inflammation and extravasation)

RN 299460-62-1 HCAPLUS  
 CN Benzamide, 5-[4-[(aminocarbonyl)hydroxyamino]-1-butynyl]-2-[2-[4-[(R)-(4-chlorophenyl)phenylmethyl]-1-piperazinyl]ethoxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

Cl

REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 6 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:1016017 HCAPLUS

DOCUMENT NUMBER: 142:6430

TITLE: Preparation of diarylmethylidene piperidine derivatives as opioid  $\delta$  receptor ligands for treating pain, anxiety and functional gastrointestinal disorders

INVENTOR(S): Brown, William L.; Griffin, Andrew; Jin, Shujuan

PATENT ASSIGNEE(S): Astrazeneca AB, Swed.; Astrazeneca UK Limited

SOURCE: PCT Int. Appl., 131 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004101522	A1	20041125	WO 2004-GB2074	20040513
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

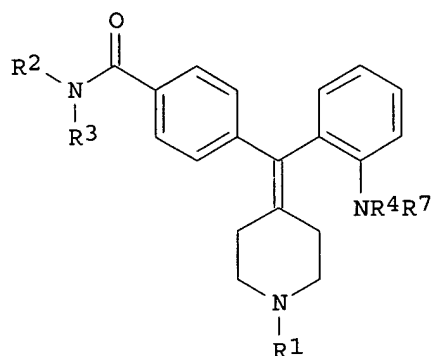
PRIORITY APPLN. INFO.: SE 2003-1444 A 20030516

SE 2004-24

A 20040109

OTHER SOURCE(S) :  
GI

MARPAT 142:6430



AB The title compds. [I; R1 = H, (un)substituted alkyl, aryl, etc.; R2-R4 = H, (un)substituted alkyl, cycloalkyl; R7 = H, OH, alkyl, etc.] which are useful in therapy, in particular in the management of pain, were prepared E.g., a multi-step synthesis of I [R1 = H; R2, R3 = Et; R4 = C(=O)Ph; R7 = H], starting from Me 4-(bromomethyl)benzoate, was given. The compds. I were found to be active toward human  $\delta$  receptors. Generally, for most of the compds. I the IC<sub>50</sub> values are in the range of 0.48 nM to 17.9 nM. The pharmaceutical composition comprising the compound I is disclosed.

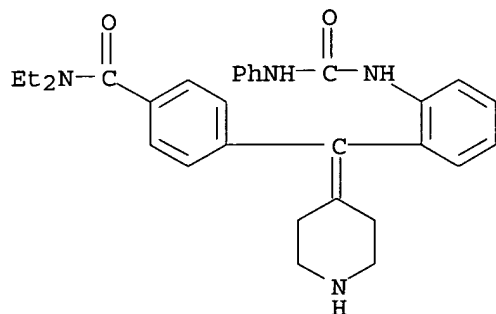
IT 798549-35-6P 798549-36-7P 798549-59-4P  
798549-60-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of diarylmethylidene piperidine derivs. as opioid  $\delta$  receptor ligands for treating pain, anxiety and functional gastrointestinal disorders)

RN 798549-35-6 HCAPLUS

CN Benzamide, N,N-diethyl-4-[[2-[[[(phenylamino)carbonyl]amino]phenyl]-4-piperidinyliidenemethyl]- (9CI) (CA INDEX NAME)

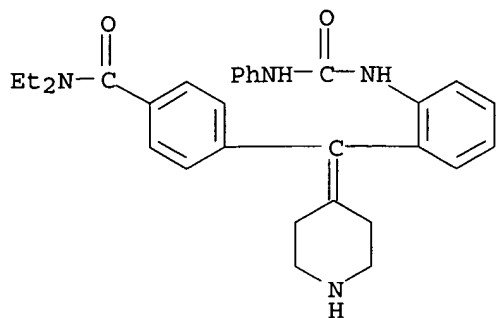


RN 798549-36-7 HCAPLUS

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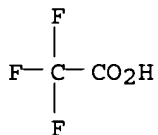
CM 1

CRN 798549-35-6  
CMF C30 H34 N4 O2

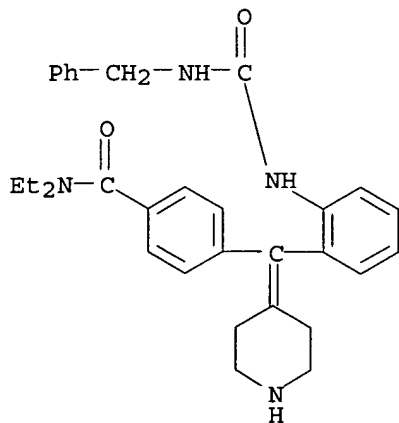


CM 2

CRN 76-05-1  
CMF C2 H F3 O2



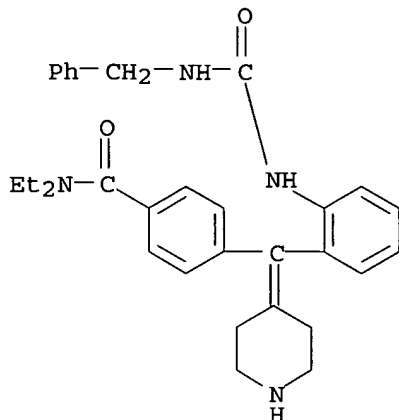
RN 798549-59-4 HCAPLUS  
CN Benzamide, N,N-diethyl-4-[[2-[[[(phenylmethyl)amino]carbonyl]amino]phenyl]-4-piperidinylidenemethyl]- (9CI) (CA INDEX NAME)



RN 798549-60-7 HCAPLUS  
CN Benzamide, N,N-diethyl-4-[[2-[[[(phenylmethyl)amino]carbonyl]amino]phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (5:6) (9CI) (CA INDEX NAME)

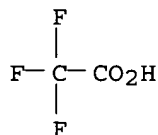
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CRN 798549-59-4  
CMF C31 H36 N4 O2



CM 2

CRN 76-05-1  
CMF C2 H F3 O2



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 7 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STM

ACCESSION NUMBER: 2004:878375 HCAPLUS

DOCUMENT NUMBER: 141:350047

TITLE: Preparation of phospholipase C inhibitors for use in treating inflammatory diseases

INVENTOR(S): Lagu, Bharat; Rupert, Kenneth; Wachter, Michael

PATENT ASSIGNEE(S): Janssen Pharmaceutica N.V., Belg.

SOURCE: PCT Int. Appl., 114 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004089901	A2	20041021	WO 2004-US9847	20040331
WO 2004089901	A3	20041209		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,



NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,  
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,  
BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,  
SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,  
TD, TG

US 2004242639 A1 20041202 US 2004-814070 20040331  
PRIORITY APPLN. INFO.: US 2003-459078P P 20030331  
OTHER SOURCE(S): MARPAT 141:350047  
GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB This invention is directed to heterocyclyl-substituted anilino phospholipase C inhibitor compds. I [X = (un)substituted-amino, -heterocyclyl, etc.; R3 = O or S; R4 = cycloalkyl, benzofused dioxolyl, benzofused dioxinyl, or aryl; L = a bond or a linking group; R5 = (un)substituted-alkyl, -cycloalkyl, or -aryl; Y = (un)substituted-alkyl; n = 1-2] useful in treating or ameliorating an inflammatory disorders and/or restenosis and enantiomers, diastereomers and pharmaceutically acceptable salts thereof. For example, compound II were prepared in a multi-steps employing a solid phase synthesis starting from 4-fluoro-3-nitrobenzoic acid. The latter inhibits phospholipase C-β2 with an IC50 = 3.4 μM.

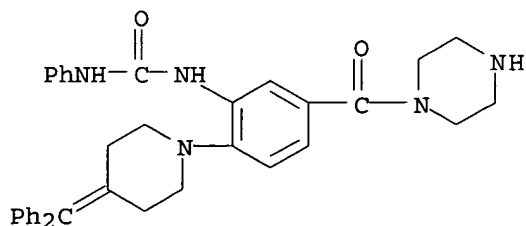
IT 775349-79-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of ureido piperidinyl derivative as phospholipase c inhibitors for treatment of inflammatory disorders)

RN 775349-79-6 HCAPLUS

CN Piperazine, 1-[4-[4-(diphenylmethylene)-1-piperidinyl]-3-[[phenylamino]carbonyl]amino]benzoyl]- (9CI) (CA INDEX NAME)



L15 ANSWER 8 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:863110 HCAPLUS

DOCUMENT NUMBER: 142:16224

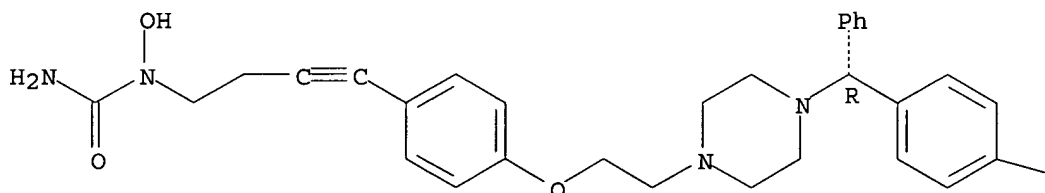
TITLE: Cetirizine and loratadine-based antihistamines with 5-lipoxygenase inhibitory activity

AUTHOR(S): Lewis, Timothy A.; Young, Michelle A.; Arrington, Mark P.; Bayless, Lynn; Cai, Xiong; Collart, Philippe; Eckman, Joseph B.; Ellis, James L.; Ene, Doina G.; Libertine, Lyn; Nicolas, Jean-Marie; Scannell, Ralph

T.; Wels, Bruce F.; Wenberg, Karen; Wypij, Donna M.  
CORPORATE SOURCE: UCB Research, Cambridge, MA, 02139, USA  
SOURCE: Bioorganic & Medicinal Chemistry Letters (2004),  
14(22), 5591-5594  
CODEN: BMCLE8; ISSN: 0960-894X  
PUBLISHER: Elsevier B.V.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 142:16224  
AB A series of compds. possessing both H1 histamine receptor antagonist and  
5-lipoxygenase (5-LO) inhibitory activities was synthesized. The  
H1-binding scaffolds of cetirizine, efletirizine, and loratadine were  
linked to a lipophilic N-hydroxyurea, the 5-LO inhibiting moiety of  
zileuton. Both activities were observed in vivo, as was increased CYP3A4  
inhibition compared to their resp. single-function drugs. Selected  
analogs in the series were shown to be orally active in guinea pig models.  
IT 299460-35-8P 299460-59-6P 299460-79-0P  
299460-95-0P 299461-00-0P 299461-07-7P  
RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); SPN (Synthetic  
preparation); THU (Therapeutic use); BIOL (Biological study); PREP  
(Preparation); USES (Uses)  
(cetirizine and loratadine-based antihistamines with lipoxygenase  
inhibitory activity)  
RN 299460-35-8 HCAPLUS  
CN Urea, N- [4- [4- [2- [4- [(R) - (4-chlorophenyl)phenylmethyl] -1-  
piperazinyl]ethoxy]phenyl] -3-butynyl] -N-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

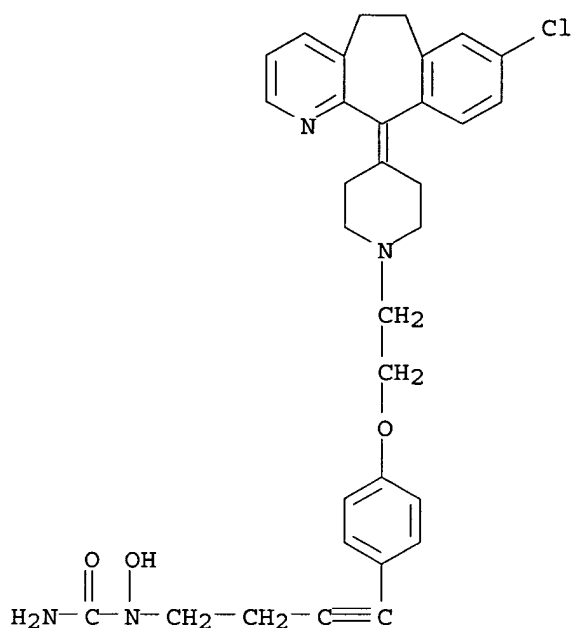
PAGE 1-A



PAGE 1-B

— c1

RN 299460-59-6 HCAPLUS  
CN Urea, N- [4- [4- [2- [4- (8-chloro-5,6-dihydro-11H-benzo[5,6]cyclohepta[1,2-  
b]pyridin-11-ylidene) -1-piperidinyl]ethoxy]phenyl] -3-butynyl] -N-hydroxy-  
(9CI) (CA INDEX NAME)

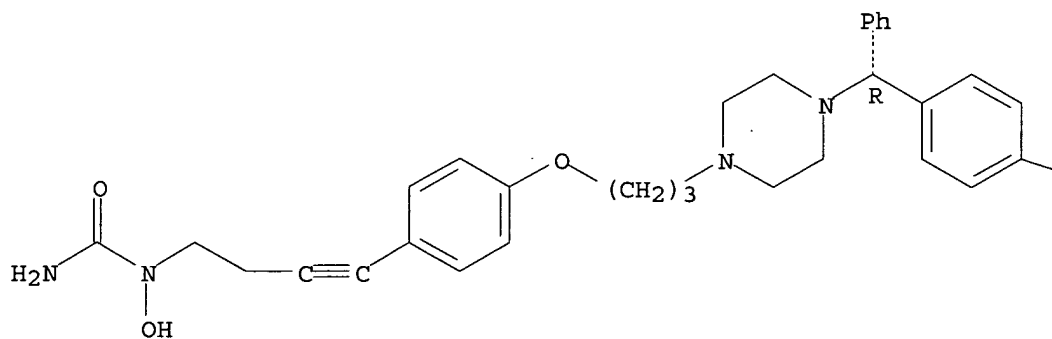


RN 299460-79-0 HCAPLUS

CN Urea, N-[4-[4-[3-[4-[(R)-(4-chlorophenyl)phenylmethyl]-1-piperazinyl]propoxy]phenyl]-3-butynyl]-N-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

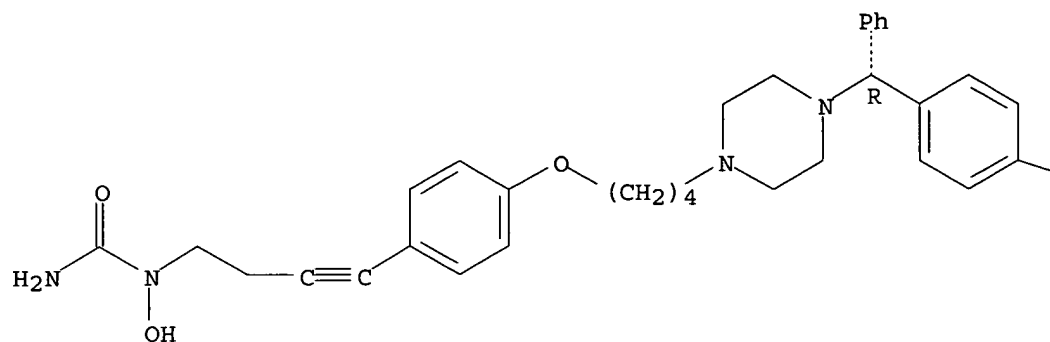
Cl

RN 299460-95-0 HCAPLUS

CN Urea, N-[4-[4-[4-[4-[(R)-(4-chlorophenyl)phenylmethyl]-1-piperazinyl]butoxy]phenyl]-3-butynyl]-N-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

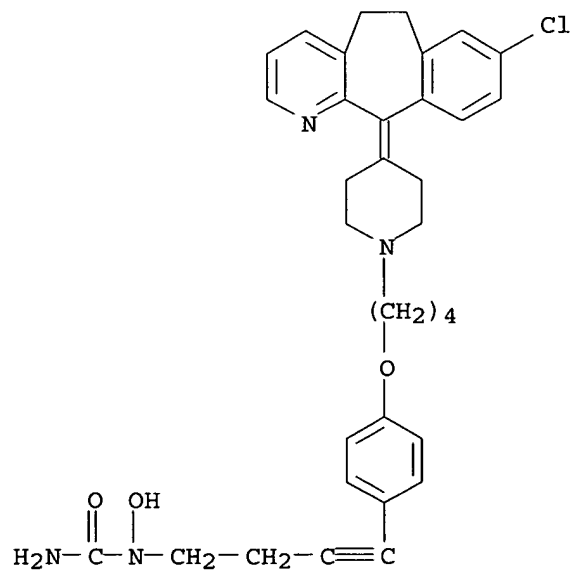
PAGE 1-A



PAGE 1-B

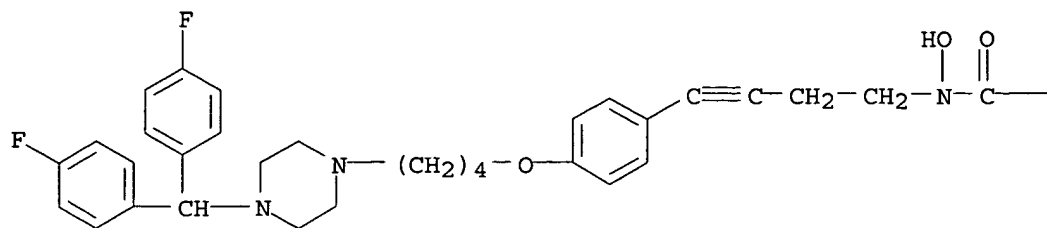
—Cl

RN 299461-00-0 HCAPLUS  
 CN Urea, N-[4-[4-[4-[4-(8-chloro-5,6-dihydro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-ylidene)-1-piperidinyl]butoxy]phenyl]-3-butynyl]-N-hydroxy-(9CI) (CA INDEX NAME)



RN 299461-07-7 HCAPLUS  
 CN Urea, N-[4-[4-[4-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]butoxy]phenyl]-3-butynyl]-N-hydroxy-(9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

— NH<sub>2</sub>

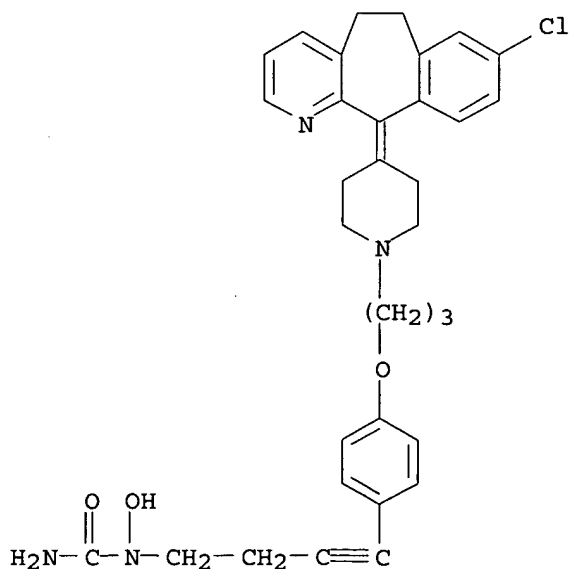
IT 299460-81-4P 299461-10-2P 802982-16-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(cetirizine and loratadine-based antihistamines with lipoxxygenase inhibitory activity)

RN 299460-81-4 HCAPLUS

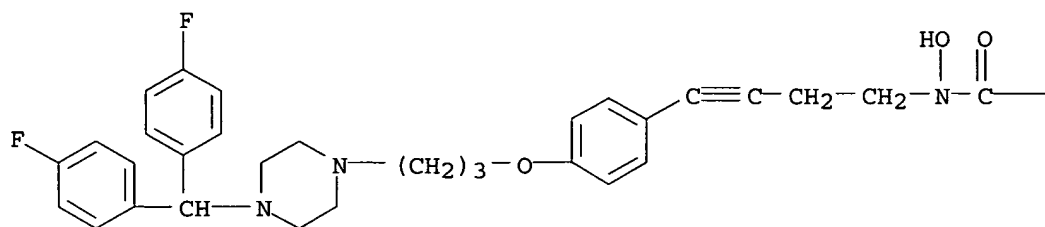
CN Urea, N-[4-[4-[3-[4-(8-chloro-5,6-dihydro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-ylidene)-1-piperidinyl]propoxy]phenyl]-3-butynyl]-N-hydroxy-(9CI) (CA INDEX NAME)



RN 299461-10-2 HCAPLUS

CN Urea, N-[4-[4-[3-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]propoxy]phenyl]-3-butynyl]-N-hydroxy- (9CI) (CA INDEX NAME)

PAGE 1-A

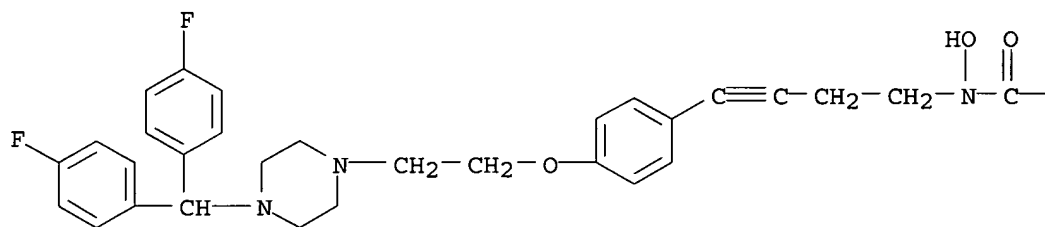


PAGE 1-B

—NH<sub>2</sub>

RN 802982-16-7 HCAPLUS  
 CN Urea, N-[4-[4-[2-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]ethoxy]phenyl]-3-butynyl]-N-hydroxy- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

—NH<sub>2</sub>

REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 9 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2004:857583 HCAPLUS  
 DOCUMENT NUMBER: 141:332220  
 TITLE: A preparation of (piperazinylphenyl)urea derivatives as phospholipase C inhibitors, useful for the treatment of inflammatory disorders  
 INVENTOR(S): Lagu, Bharat; Wachter, Michael; Rupert, Kenneth; Wachter, Michael  
 PATENT ASSIGNEE(S): Janssen Pharmaceutica N.V., Belg.  
 SOURCE: PCT Int. Appl., 141 pp.  
 CODEN: PIXXD2

DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004087685	A2	20041014	WO 2004-US9846	20040331
WO 2004087685	A3	20041216		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2004235855	A1	20041125	US 2004-815017	20040331
PRIORITY APPLN. INFO.:			US 2003-458938P	P 20030331
OTHER SOURCE(S):	MARPAT 141:332220			
GI				

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The invention relates to a preparation of (piperazinyphenyl)urea derivs. of formula I [wherein: X is NH<sub>2</sub>, NH-alkyl, NHOH, NH-CN, or heterocyclic ring, etc.; Y is one or more (un)substituted alkyl; Z is (CH<sub>2</sub>)<sub>2-5</sub>; R<sub>1</sub> is (un)substituted alkyl, cycloalkyl, or aryl, etc.; R<sub>2</sub> is (un)substituted alkyl, C(O)alkyl, C(O)alkenyl, aryl, or cycloalkyl, etc.; R<sub>3</sub> is O or S], useful as PLC- $\beta$ 2 inhibitors. For instance, (piperazinyphenyl)urea derivative II (IC<sub>50</sub> = 1.2  $\mu$ M) was prepared via addition of resin-bound (piperazinyphenyl)amine derivative III to Ph-N=C=O and subsequent resin cleavage (example 1).

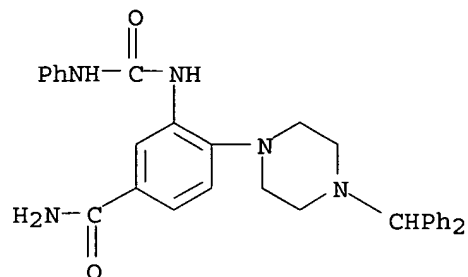
IT 773882-10-3P 773882-13-6P 773882-14-7P  
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 773882-70-5P 773882-71-6P 773882-72-7P  
 773882-73-8P 773882-74-9P 773882-76-1P  
 773882-85-2P 773882-86-3P 773882-87-4P  
 773882-88-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of (piperazinylphenyl)urea derivs. useful as PLC-β2 inhibitors)

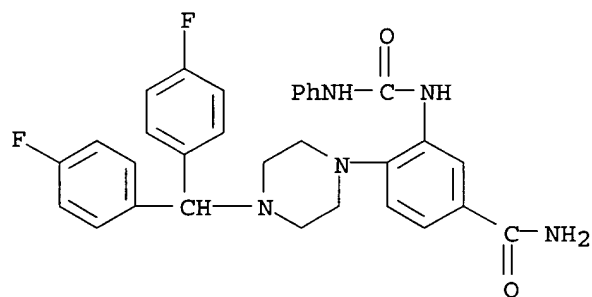
RN 773882-10-3 HCAPLUS

CN Benzamide, 4-[4-(diphenylmethyl)-1-piperazinyl]-3-  
[[ (phenylamino)carbonyl]amino] - (9CI) (CA INDEX NAME)



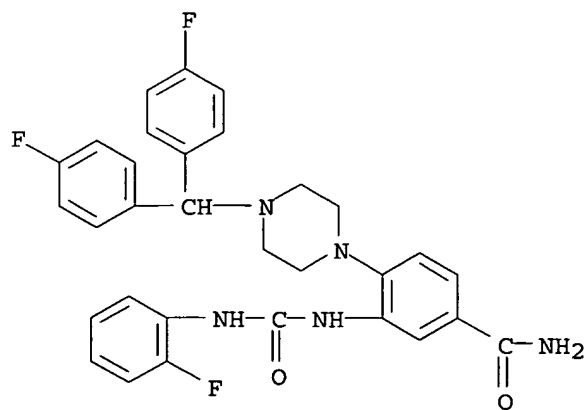
RN 773882-13-6 HCAPLUS

CN Benzamide, 4-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]-3-  
[[ (phenylamino)carbonyl]amino] - (9CI) (CA INDEX NAME)



RN 773882-14-7 HCAPLUS

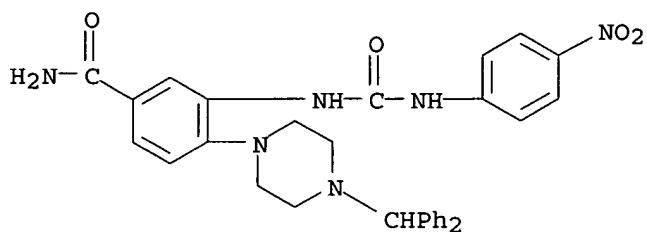
CN Benzamide, 4-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]-3-[[[(2-fluorophenyl)amino]carbonyl]amino] - (9CI) (CA INDEX NAME)



RN 773882-15-8 HCAPLUS

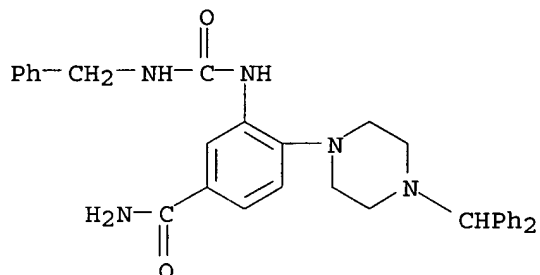


CN Benzamide, 4-[4-(diphenylmethyl)-1-piperazinyl]-3-[[[(4-nitrophenyl)amino]carbonyl]amino]- (9CI) (CA INDEX NAME)



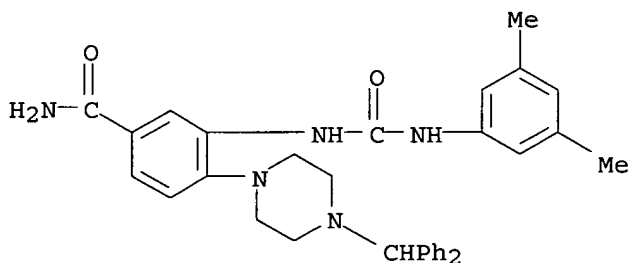
RN 773882-16-9 HCAPLUS

CN Benzamide, 4-[4-(diphenylmethyl)-1-piperazinyl]-3-[[[(phenylmethyl)amino]carbonyl]amino]- (9CI) (CA INDEX NAME)



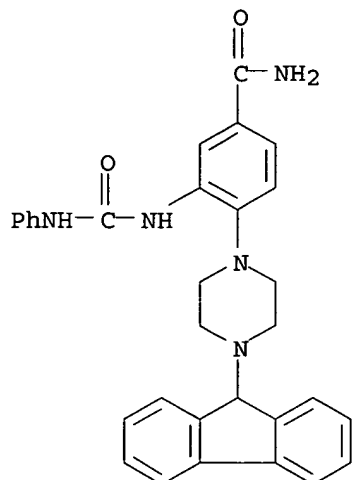
RN 773882-17-0 HCAPLUS

CN Benzamide, 3-[[[(3,5-dimethylphenyl)amino]carbonyl]amino]-4-[4-(diphenylmethyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



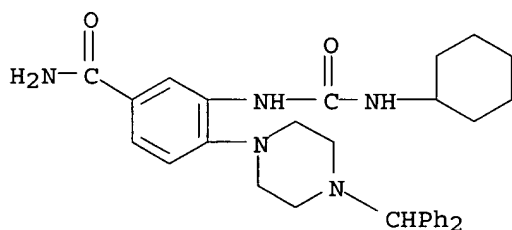
RN 773882-18-1 HCAPLUS

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RN 773882-19-2 HCAPLUS

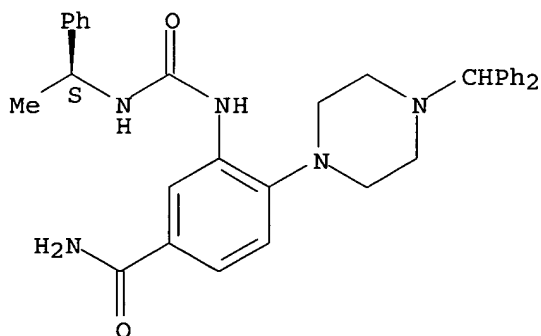
CN Benzamide, 3-[[4-[(cyclohexylamino)carbonyl]amino]-4-(4-(diphenylmethyl)-1-piperazinyl)-(9CI) (CA INDEX NAME)



RN 773882-20-5 HCAPLUS

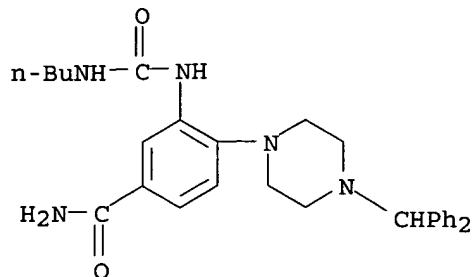
CN Benzamide, 4-[4-(diphenylmethyl)-1-piperazinyl]-3-[[[(1S)-1-phenylethyl]amino]carbonyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



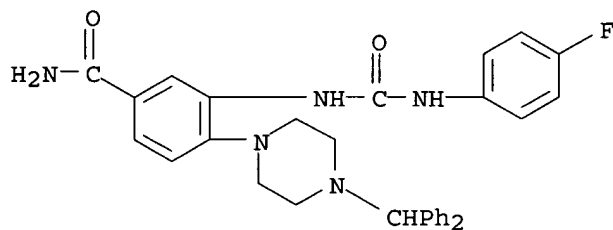
RN 773882-21-6 HCAPLUS

CN Benzamide, 3-[[4-[(butylamino)carbonyl]amino]-4-(4-(diphenylmethyl)-1-piperazinyl)-(9CI) (CA INDEX NAME)



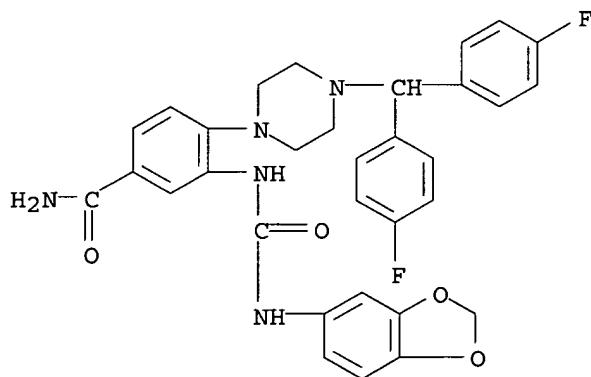
RN 773882-22-7 HCAPLUS

CN Benzamide, 4-[4-(diphenylmethyl)-1-piperazinyl]-3-[[[(4-fluorophenyl)amino]carbonyl]amino]- (9CI) (CA INDEX NAME)



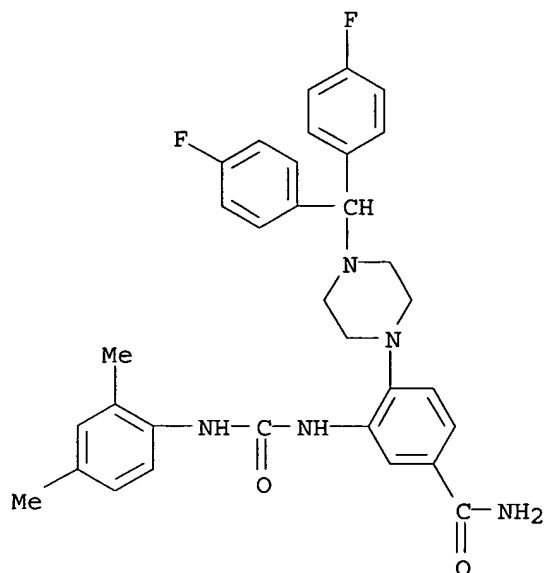
RN 773882-23-8 HCAPLUS

CN Benzamide, 3-[[[(1,3-benzodioxol-5-ylamino)carbonyl]amino]-4-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]]- (9CI) (CA INDEX NAME)



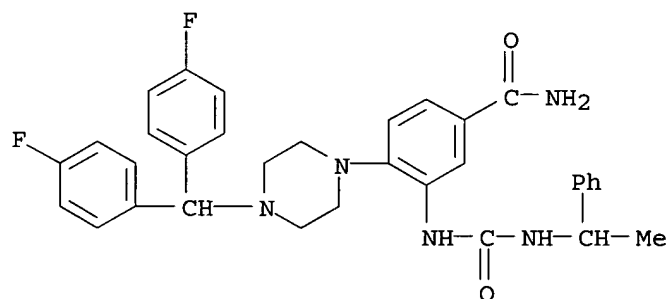
RN 773882-24-9 HCAPLUS

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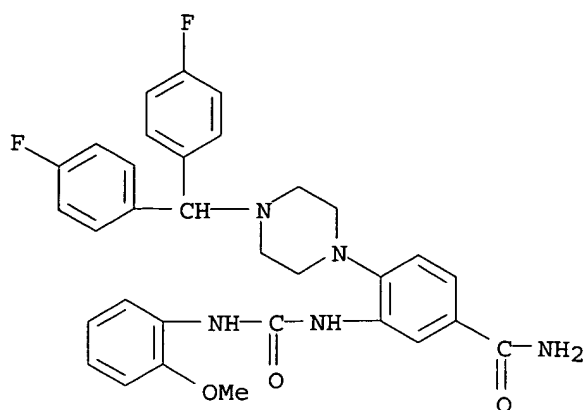
RN 773882-25-0 HCAPLUS

CN Benzamide, 4-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]-3-[[[(1-phenylethyl)amino]carbonyl]amino]- (9CI) (CA INDEX NAME)



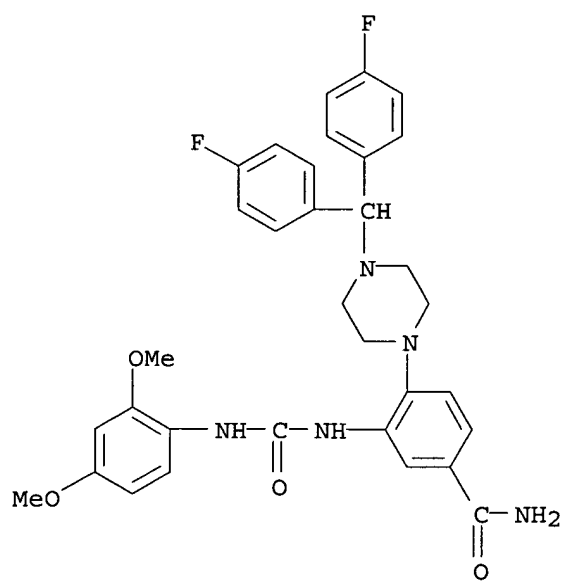
RN 773882-26-1 HCAPLUS

CN Benzamide, 4-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]-3-[[[(2-methoxyphenyl)amino]carbonyl]amino]- (9CI) (CA INDEX NAME)



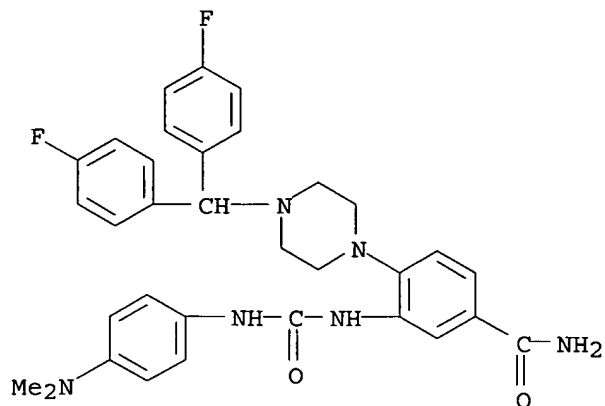
RN 773882-27-2 HCAPLUS

CN Benzamide, 4-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]-3-[[[(2,4-dimethoxyphenyl)amino]carbonyl]amino]- (9CI) (CA INDEX NAME)



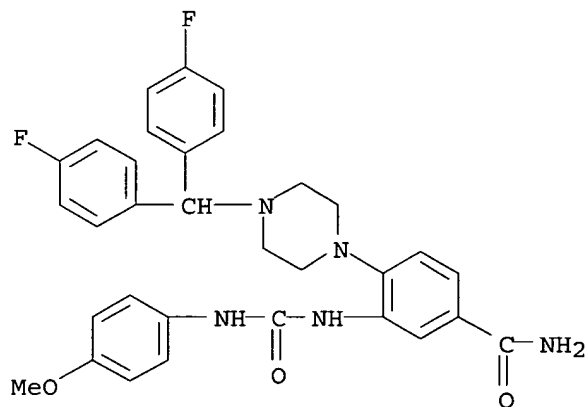
RN 773882-28-3 HCAPLUS

CN Benzamide, 4-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]-3-[[[4-(dimethylamino)phenyl]amino]carbonyl]amino]- (9CI) (CA INDEX NAME)



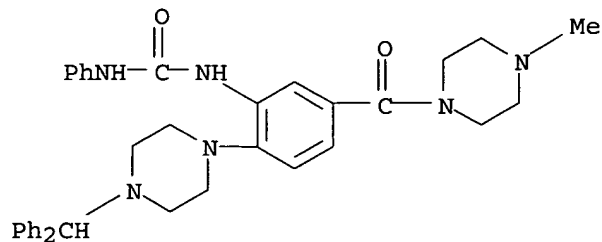
RN 773882-29-4 HCAPLUS

CN Benzamide, 4-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]-3-[[[(4-methoxyphenyl)amino]carbonyl]amino]- (9CI) (CA INDEX NAME)



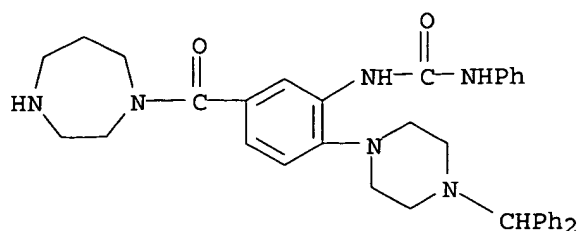
RN 773882-32-9 HCAPLUS

CN Piperazine, 1-[4-[4-(diphenylmethyl)-1-piperazinyl]-3-[[[(phenylamino)carbonyl]amino]benzoyl]-4-methyl]- (9CI) (CA INDEX NAME)

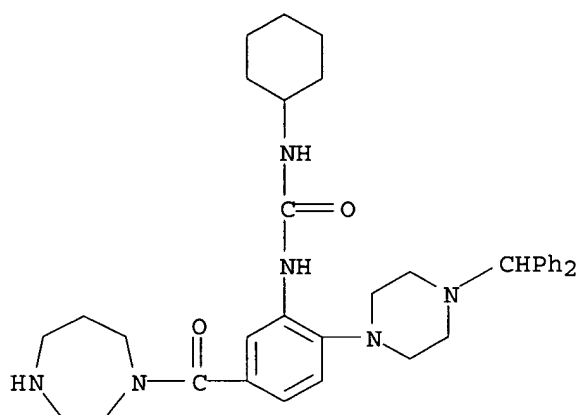


RN 773882-33-0 HCAPLUS

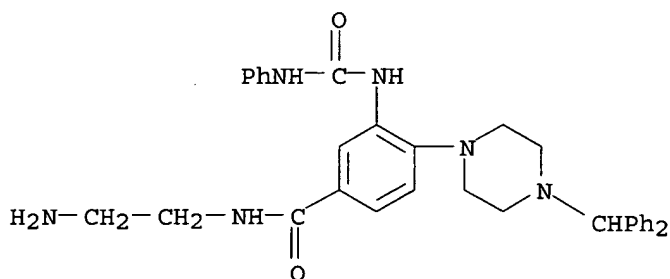
CN 1H-1,4-Diazepine, 1-[4-[4-(diphenylmethyl)-1-piperazinyl]-3-[[[(phenylamino)carbonyl]amino]benzoyl]hexahydro- (9CI) (CA INDEX NAME)



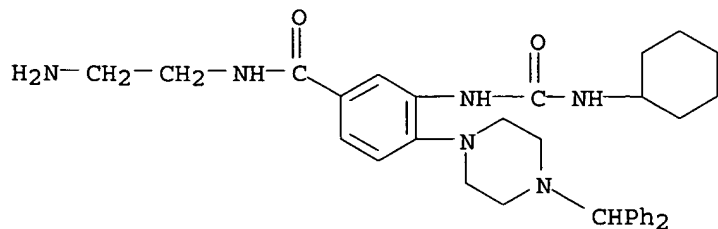
RN 773882-34-1 HCAPLUS  
 CN 1H-1,4-Diazepine, 1-[3-[[[(cyclohexylamino)carbonyl]amino]-4-[4-(diphenylmethyl)-1-piperazinyl]benzoyl]hexahydro- (9CI) (CA INDEX NAME)



RN 773882-35-2 HCAPLUS  
 CN Benzamide, N-(2-aminoethyl)-4-[4-(diphenylmethyl)-1-piperazinyl]-3-[[[(phenylamino)carbonyl]amino]- (9CI) (CA INDEX NAME)

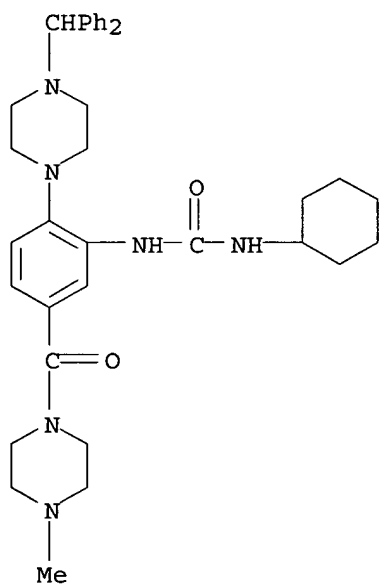


RN 773882-36-3 HCAPLUS  
 CN Benzamide, N-(2-aminoethyl)-3-[[[(cyclohexylamino)carbonyl]amino]-4-[4-(diphenylmethyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



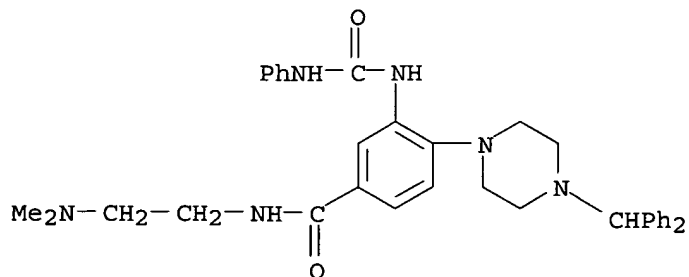
RN 773882-37-4 HCAPLUS

CN Piperazine, 1-[3-[[[(cyclohexylamino)carbonyl]amino]-4-[4-(diphenylmethyl)-1-piperazinyl]benzoyl]-4-methyl- (9CI) (CA INDEX NAME)



RN 773882-38-5 HCAPLUS

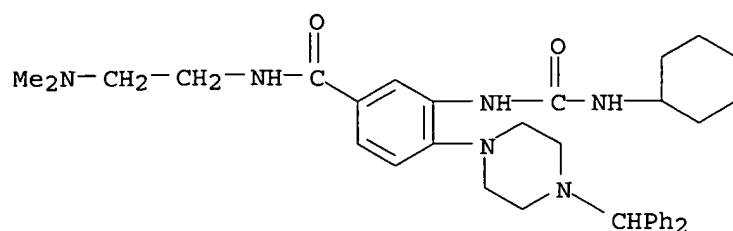
CN Benzamide, N-[2-(dimethylamino)ethyl]-4-[4-(diphenylmethyl)-1-piperazinyl]-3-[[[(phenylamino)carbonyl]amino]- (9CI) (CA INDEX NAME)



RN 773882-39-6 HCAPLUS

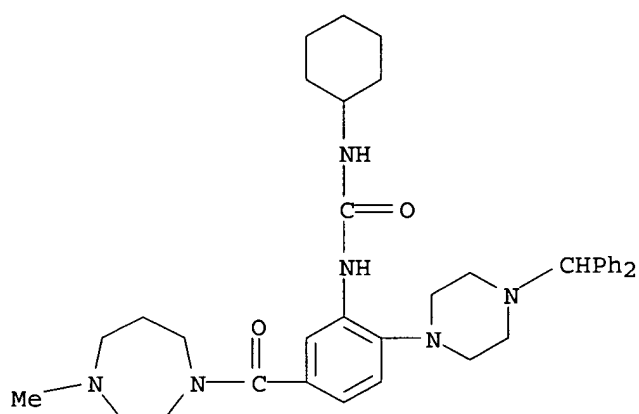
CN Benzamide, 3-[[[(cyclohexylamino)carbonyl]amino]-N-[2-(dimethylamino)ethyl]-4-[4-(diphenylmethyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)





RN 773882-40-9 HCAPLUS

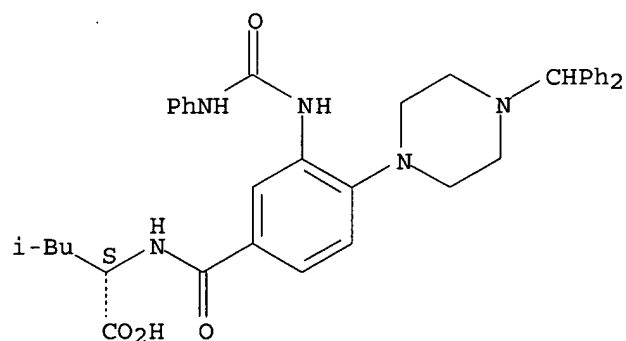
CN 1H-1,4-Diazepine, 1-[3-[[[(cyclohexylamino) carbonyl] amino]-4-[4-(diphenylmethyl)-1-piperazinyl]benzoyl]hexahydro-4-methyl- (9CI) (CA INDEX NAME)



RN 773882-41-0 HCAPLUS

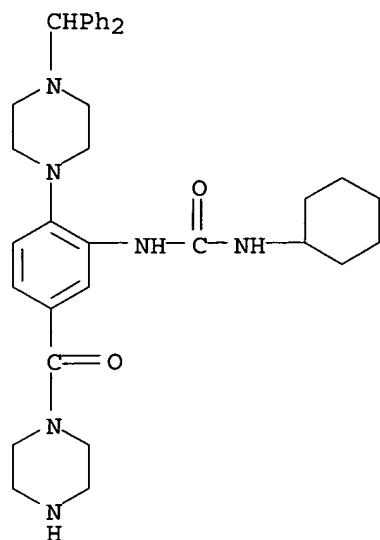
CN L-Leucine, N-[4-[4-(diphenylmethyl)-1-piperazinyl]-3-[[[(phenylamino) carbonyl] amino]benzoyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



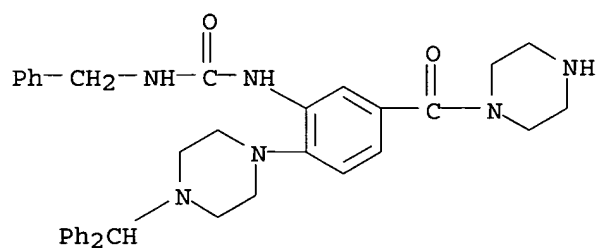
RN 773882-42-1 HCAPLUS

CN Piperazine, 1-[3-[[[(cyclohexylamino) carbonyl] amino]-4-[4-(diphenylmethyl)-1-piperazinyl]benzoyl]- (9CI) (CA INDEX NAME)



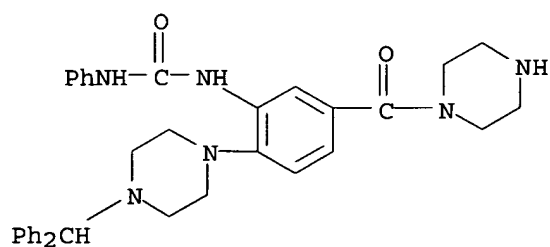
RN 773882-43-2 HCAPLUS

CN Piperazine, 1-[4-[4-(diphenylmethyl)-1-piperazinyl]-3-[[[(phenylmethyl)amino]carbonyl]amino]benzoyl]- (9CI) (CA INDEX NAME)



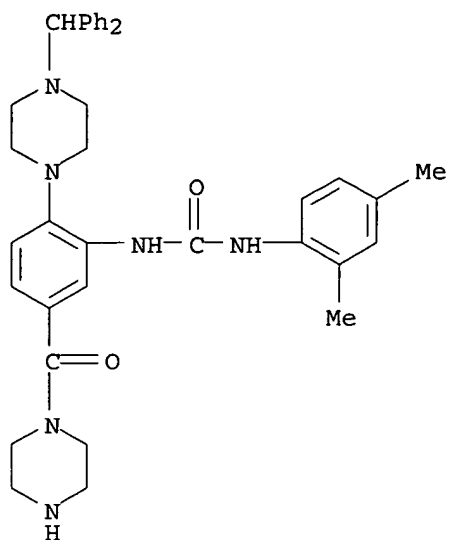
RN 773882-44-3 HCAPLUS

CN Piperazine, 1-[4-[4-(diphenylmethyl)-1-piperazinyl]-3-[[[(phenylamino)carbonyl]amino]benzoyl]- (9CI) (CA INDEX NAME)



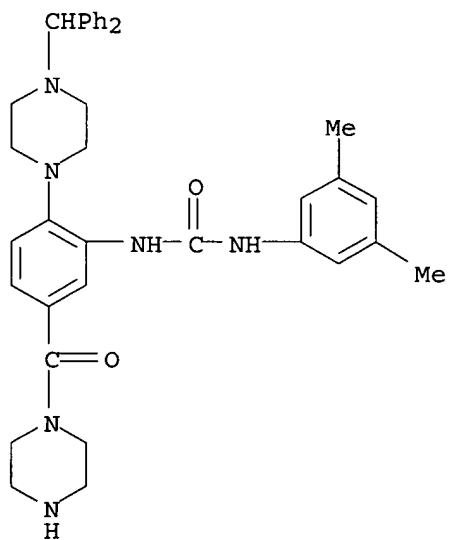
RN 773882-45-4 HCAPLUS

CN Piperazine, 1-[3-[[[(2,4-dimethylphenyl)amino]carbonyl]amino]-4-[4-(diphenylmethyl)-1-piperazinyl]benzoyl]- (9CI) (CA INDEX NAME)



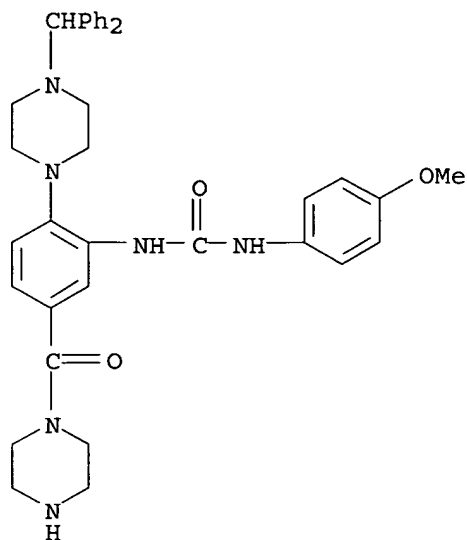
RN 773882-46-5 HCAPLUS

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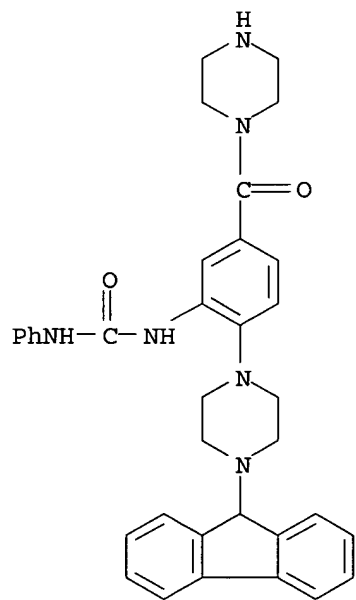
RN 773882-47-6 HCAPLUS

CN Piperazine, 1-[4-[4-(diphenylmethyl)-1-piperazinyl]-3-[[[(4-methoxyphenyl)amino]carbonyl]amino]benzoyl]- (9CI) (CA INDEX NAME)



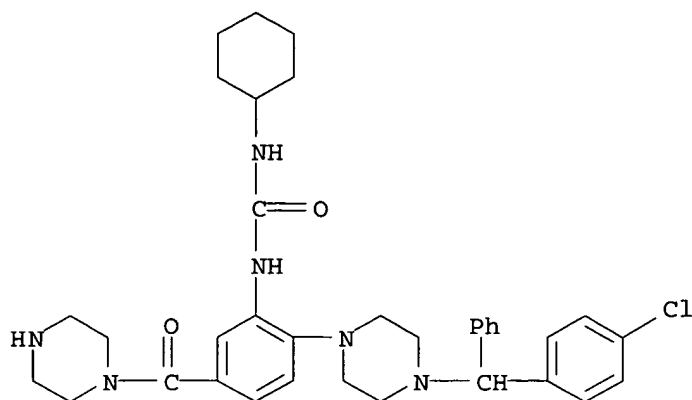
RN 773882-48-7 HCAPLUS

CN Piperazine, 1-[4-[4-(9H-fluoren-9-yl)-1-piperazinyl]-3-  
[[ (phenylamino)carbonyl]amino]benzoyl]- (9CI) (CA INDEX NAME)



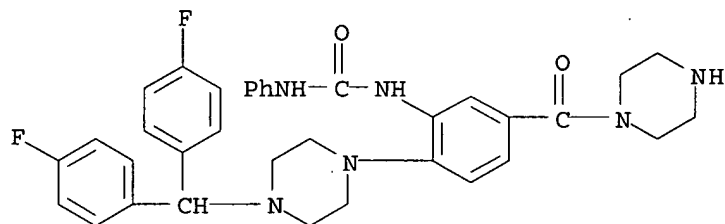
RN 773882-49-8 HCAPLUS

CN Piperazine, 1-[4-[4-[(4-chlorophenyl)phenylmethyl]-1-piperazinyl]-3-  
[[ (cyclohexylamino)carbonyl]amino]benzoyl]- (9CI) (CA INDEX NAME)



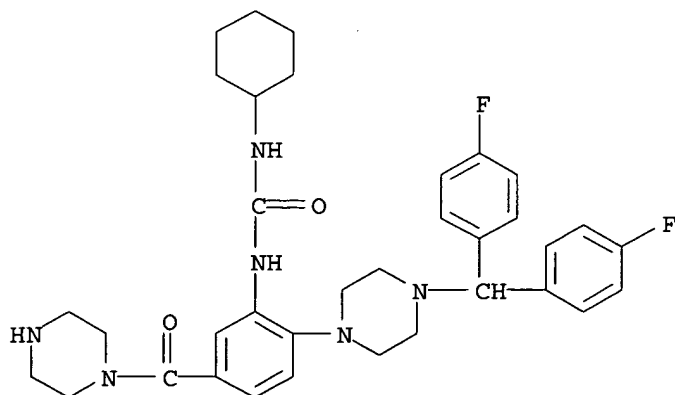
RN 773882-50-1 HCAPLUS

CN Piperazine, 1-[4-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]-3-[[phenylamino]carbonyl]amino]benzoyl- (9CI) (CA INDEX NAME)



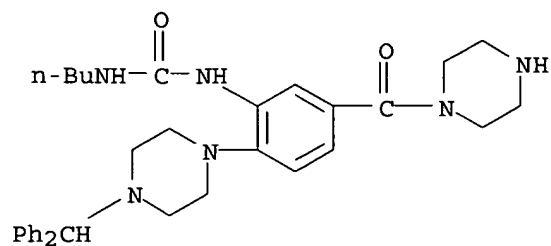
RN 773882-52-3 HCAPLUS

CN Piperazine, 1-[4-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]-3-[[cyclohexylamino]carbonyl]amino]benzoyl- (9CI) (CA INDEX NAME)



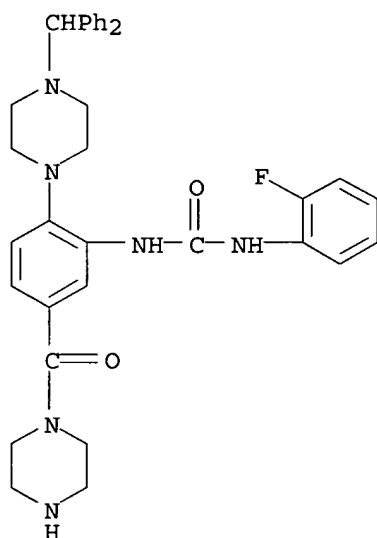
RN 773882-66-9 HCAPLUS

CN Piperazine, 1-[3-[[[butylamino]carbonyl]amino]-4-[4-(diphenylmethyl)-1-piperazinyl]benzoyl]- (9CI) (CA INDEX NAME)



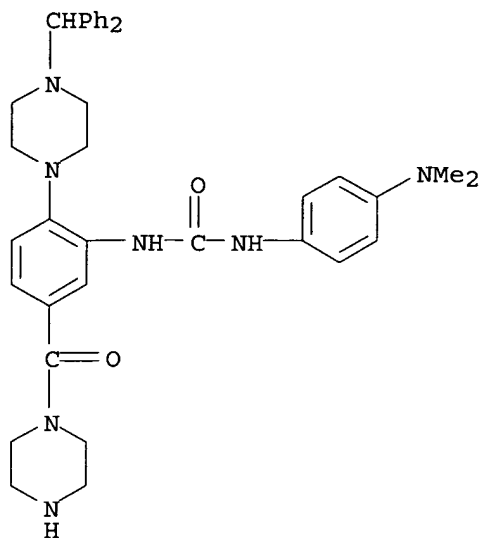
RN 773882-67-0 HCAPLUS

CN Piperazine, 1-[4-[4-(diphenylmethyl)-1-piperazinyl]-3-[[[(2-fluorophenyl)amino]carbonyl]amino]benzoyl]- (9CI) (CA INDEX NAME)



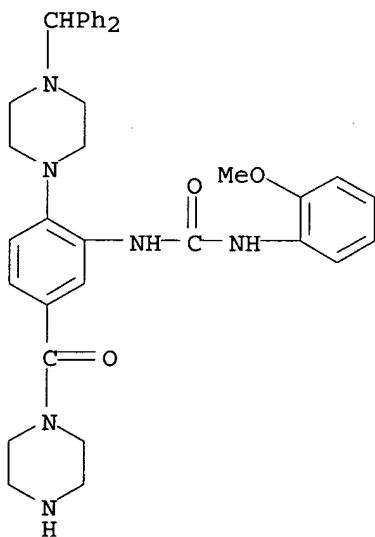
RN 773882-68-1 HCAPLUS

CN Piperazine, 1-[3-[[[4-(dimethylamino)phenyl]amino]carbonyl]amino]-4-[4-(diphenylmethyl)-1-piperazinyl]benzoyl]- (9CI) (CA INDEX NAME)



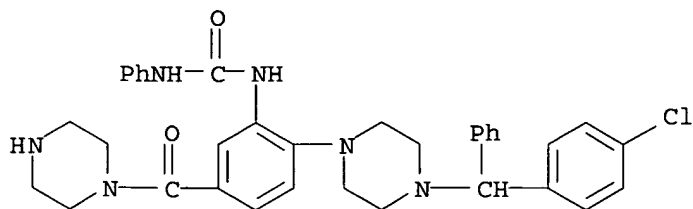
RN 773882-69-2 HCAPLUS

CN Piperazine, 1-[4-[4-(diphenylmethyl)-1-piperazinyl]-3-[[[2-methoxyphenyl)amino]carbonyl]amino]benzoyl]- (9CI) (CA INDEX NAME)



RN 773882-70-5 HCAPLUS

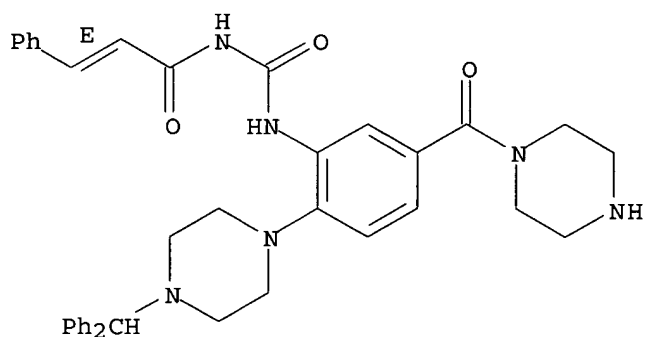
CN Piperazine, 1-[4-[4-[(4-chlorophenyl)phenylmethyl]-1-piperazinyl]-3-[[[2-methoxyphenyl)amino]carbonyl]amino]benzoyl]- (9CI) (CA INDEX NAME)



RN 773882-71-6 HCAPLUS

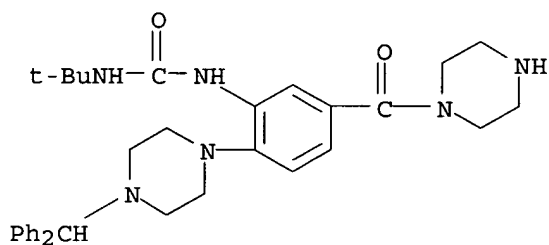
CN 2-Propenamide, N-[[[2-[4-(diphenylmethyl)-1-piperazinyl]-5-(1-piperazinylcarbonyl)phenyl]amino]carbonyl]-3-phenyl-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 773882-72-7 HCAPLUS

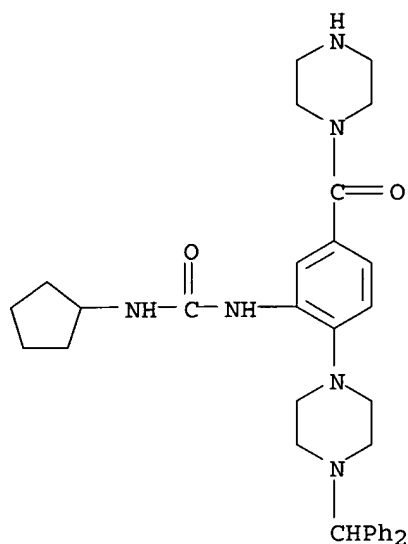
CN Piperazine, 1-[3-[[[(1,1-dimethylethyl)amino]carbonyl]amino]-4-[4-(diphenylmethyl)-1-piperazinyl]benzoyl]- (9CI) (CA INDEX NAME)



RN 773882-73-8 HCAPLUS

CN Piperazine, 1-[3-[[[(cyclopentylamino)carbonyl]amino]-4-[4-(diphenylmethyl)-1-piperazinyl]benzoyl]- (9CI) (CA INDEX NAME)

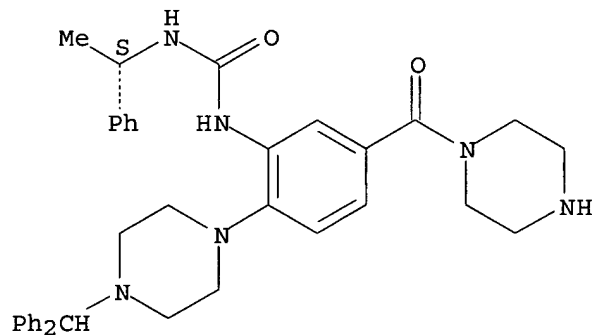




RN 773882-74-9 HCAPLUS

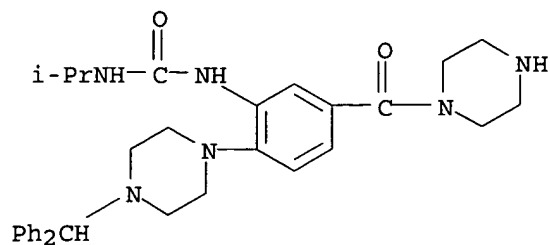
CN Piperazine, 1-[4-[4-(diphenylmethyl)-1-piperazinyl]-3-[[[(1S)-1-phenylethyl]amino]carbonyl]amino]benzoyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 773882-76-1 HCAPLUS

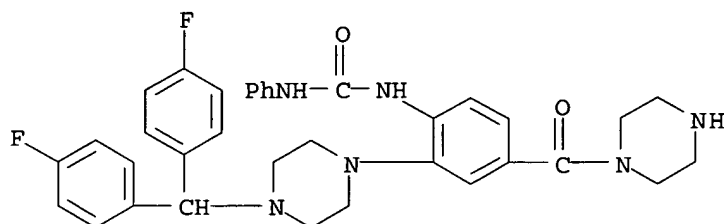
CN Piperazine, 1-[4-[4-(diphenylmethyl)-1-piperazinyl]-3-[[[(1-methylethyl)amino]carbonyl]amino]benzoyl]- (9CI) (CA INDEX NAME)



RN 773882-85-2 HCAPLUS

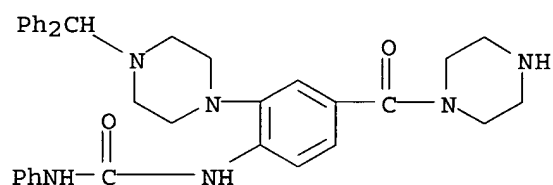
CN Piperazine, 1-[3-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]-4-

[[ (phenylamino)carbonyl]amino]benzoyl] - (9CI) (CA INDEX NAME)



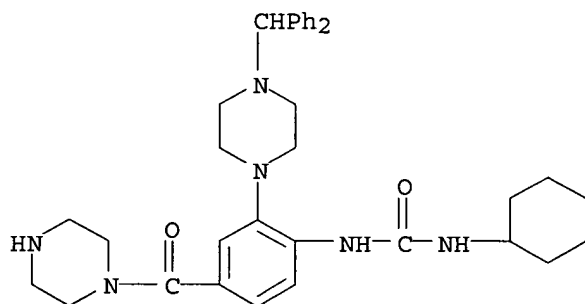
RN 773882-86-3 HCAPLUS

CN Piperazine, 1-[3-[4-(diphenylmethyl)-1-piperazinyl]-4-  
[[ (phenylamino)carbonyl]amino]benzoyl] - (9CI) (CA INDEX NAME)



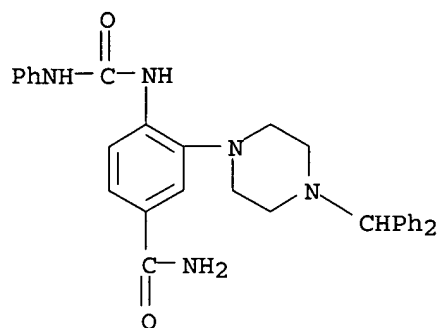
RN 773882-87-4 HCAPLUS

CN Piperazine, 1-[4-[[ (cyclohexylamino)carbonyl]amino]-3-[4-(diphenylmethyl)-  
1-piperazinyl]benzoyl] - (9CI) (CA INDEX NAME)



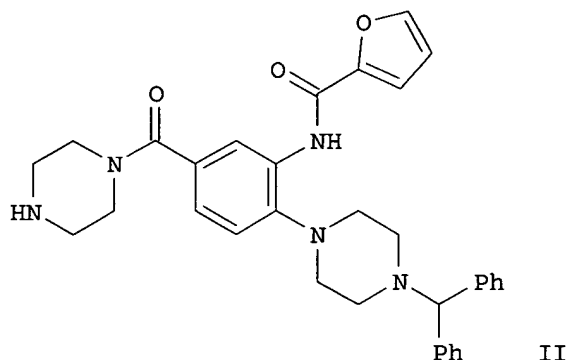
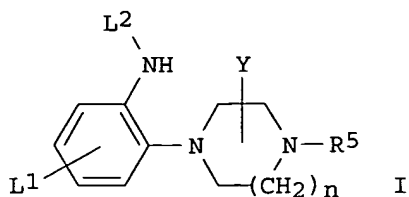
RN 773882-88-5 HCAPLUS

CN Benzamide, 3-[4-(diphenylmethyl)-1-piperazinyl]-4-  
[[ (phenylamino)carbonyl]amino] - (9CI) (CA INDEX NAME)



L15 ANSWER 10 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2004:857558 HCAPLUS  
 DOCUMENT NUMBER: 141:350197  
 TITLE: Preparation of phospholipase c inhibitors for use in  
 treating inflammatory disorders  
 INVENTOR(S): Lagu, Bharat; Rupert, Kenneth; Wachter, Michael  
 PATENT ASSIGNEE(S): Janssen Pharmaceutica N.V., Belg.  
 SOURCE: PCT Int. Appl., 98 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004087654	A2	20041014	WO 2004-US9839	20040331
WO 2004087654	A3	20050127		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2004235827	A1	20041125	US 2004-815048	20040331
PRIORITY APPLN. INFO.:			US 2003-459067P	P 20030331
OTHER SOURCE(S):	MARPAT 141:350197			
GI				



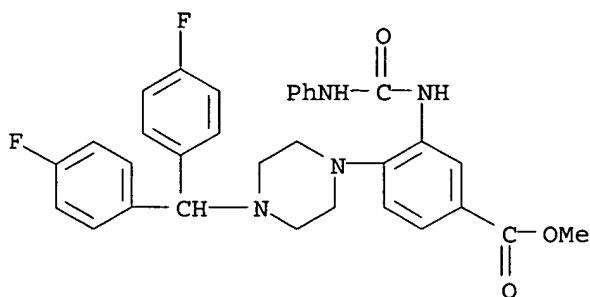
AB This invention is directed to preparation of heterocyclyl-substituted anilino phospholipase C inhibitor compds. I [L1 = (un)substituted-alkyl, -heterocyclic carbonyl, -alkylsulfonyl, etc.; L2 = (un)substituted-alkyl, -alkylsulfonyl, -N-alkylamide, etc.; R5 = (un)substituted-alkyl, -cycloalkyl, -aryl; Y = one or more optionally present (un)substituted alkyl substituents; n = 1-2] useful in treating or ameliorating an inflammatory disorders and/or restenosis and enantiomers, diastereomers and pharmaceutically acceptable salts thereof. Thus, e.g., II was prepared in six steps employing a solid phase synthesis starting from piperazine (47% yield). Solution phase methods for preparing I are also presented. I possessed IC50 values ranging from 8.7 to >25  $\mu$ M. The present invention is further directed to pharmaceutical compns. comprising the compds. of the present invention and to methods for treating conditions affected by phospholipase modulation.

IT **774582-91-1P**

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
(solution phase synthesis of piperazinyl derivs. and analogs thereof as phospholipase C inhibitors for treatment of inflammatory disorders)

RN 774582-91-1 HCAPLUS

CN Benzoic acid, 4-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]-3-[[ (phenylamino)carbonyl]amino]-, methyl ester (9CI) (CA INDEX NAME)



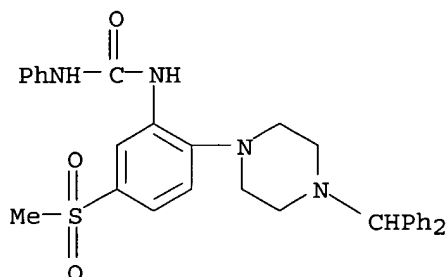
IT 774582-89-7P 774582-90-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(solution phase synthesis of piperazinyl derivs. and analogs thereof as phospholipase C inhibitors for treatment of inflammatory disorders)

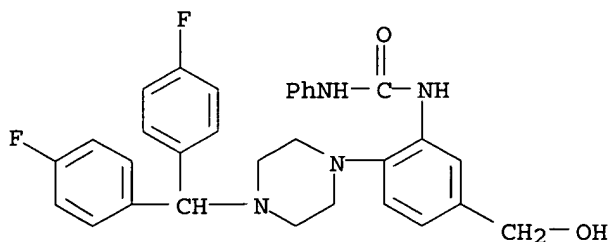
RN 774582-89-7 HCAPLUS

CN Urea, N-[2-[4-(diphenylmethyl)-1-piperazinyl]-5-(methylsulfonyl)phenyl]-N'-phenyl- (9CI) (CA INDEX NAME)



RN 774582-90-0 HCAPLUS

CN Urea, N-[2-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]-5-(hydroxymethyl)phenyl]-N'-phenyl- (9CI) (CA INDEX NAME)



L15 ANSWER 11 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:633909 HCAPLUS

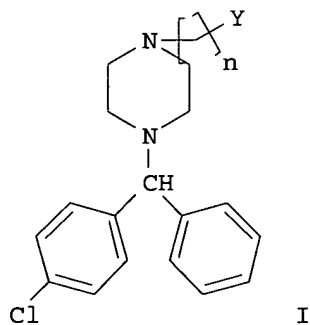
DOCUMENT NUMBER: 141:157138

TITLE: Preparation of piperazine derivatives and their use as synthesis intermediates

INVENTOR(S): Ates, Celal; Cavoy, Emile; Bouvy, Didier

PATENT ASSIGNEE(S): Ucb Farchim Sa, Switz.  
 SOURCE: PCT Int. Appl., 18 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004065360	A2	20040805	WO 2004-EP399	20040120
WO 2004065360	A3	20041111		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI				
CA 2514145	AA	20040805	CA 2004-2514145	20040120
EP 1590323	A2	20051102	EP 2004-703367	20040120
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
NO 2005003910	A	20051021	NO 2005-3910	20050822
PRIORITY APPLN. INFO.:			EP 2003-1565	A 20030123
			WO 2004-EP399	W 20040120
OTHER SOURCE(S):		MARPAT 141:157138		
GI				



AB Enantiomerically pure piperazine derivs. (I; Y = hydroxy, leaving group; n = 1-5), and their use as synthesis intermediates, especially for the preparation of

pharmaceutically active compds. (no data), is described.

IT 299460-62-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

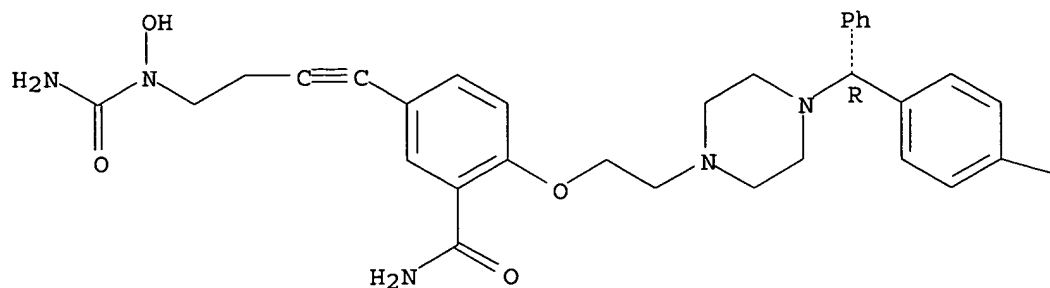
(preparation of piperazine derivs. and their use as synthesis intermediates)

RN 299460-62-1 HCAPLUS

CN Benzamide, 5-[4-[(aminocarbonyl)hydroxyamino]-1-butynyl]-2-[2-[4-[(R)-(4-chlorophenyl)phenylmethyl]-1-piperazinyl]ethoxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

Cl

IT 299461-16-8P 728948-87-6P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of piperazine derivs. and their use as synthesis intermediates)  
 RN 299461-16-8 HCAPLUS  
 CN Benzamide, 5-[4-[(aminocarbonyl)hydroxyamino]-1-butynyl]-2-[2-[4-[(R)-(4-chlorophenyl)phenylmethyl]-1-piperazinyl]ethoxy]-, (2E)-2-butenedioate  
 (1:1) (salt) (9CI) (CA INDEX NAME)

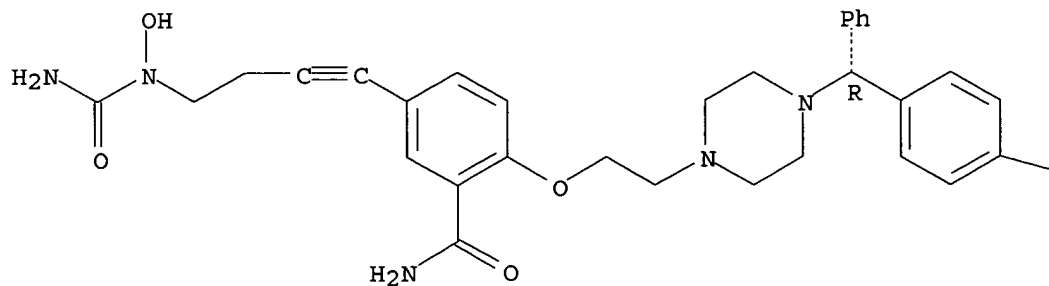
CM 1

CRN 299460-62-1

CMF C31 H34 Cl N5 O4

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

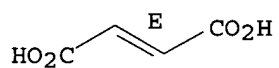
—Cl

CM 2

CRN 110-17-8

CMF C4 H4 O4

Double bond geometry as shown.



RN 728948-87-6 HCAPLUS

CN Butanedioic acid, hydroxy-, (2S)-, compd. with N-[4-[4-[2-[4-[(R)-(4-chlorophenyl)phenylmethyl]-1-piperazinyl]ethoxy]phenyl]-3-butyryl]-N-hydroxyurea (1:1) (9CI) (CA INDEX NAME)

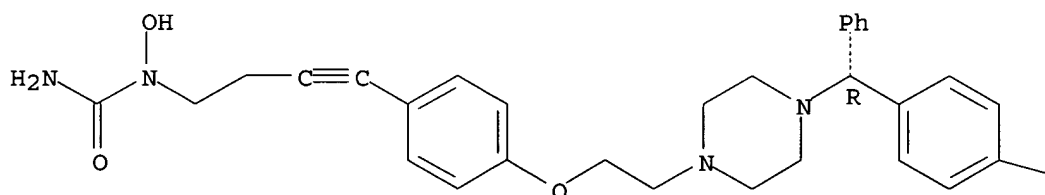
CM 1

CRN 299460-35-8

CMF C30 H33 Cl N4 O3

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

—Cl

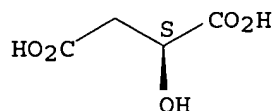
CM 2

CRN 97-67-6



CMF C4 H6 O5

Absolute stereochemistry. Rotation (-).



L15 ANSWER 12 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2004:412931 HCAPLUS  
 DOCUMENT NUMBER: 140:423708  
 TITLE: Preparation of 4-(phenylpiperazinylmethyl)benzamides  
 for treatment of pain, anxiety, or gastrointestinal  
 disorders  
 INVENTOR(S): Brown, William; Griffin, Andrew  
 PATENT ASSIGNEE(S): Astrazeneca AB, Swed.  
 SOURCE: PCT Int. Appl., 127 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004041801	A1	20040521	WO 2003-SE1706	20031105
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1562923	A1	20050817	EP 2003-770197	20031105
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
PRIORITY APPLN. INFO.:			SE 2002-3302	A 20021107
			WO 2003-SE1706	W 20031105
OTHER SOURCE(S):			MARPAT 140:423708	
GI				

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Title compds. I [wherein R1 = (un)substituted alkyl or cycloalkyl(alkyl), (hetero)aryl, R8CO, R8SO2, R8SO, R8NHCO, R8CS, or R8NHCS; ; R2 = H or (un)substituted alkyl; R3 = H or (un)substituted alkoxy carbonyl, alkyl, or cycloalkyl(alkyl); R8 = (un)substituted alkyl, (hetero)aryl(alkyl), or cycloalkyl(alkyl); or pharmaceutically acceptable salts thereof] were prepared as opioid  $\delta$  receptor ligands. For example, amidation of 4-iodobenzoyl chloride with Et2NH using TEA in CH2Cl2 provided 4-iodo-N,N-diethylbenzamide, which was coupled with 3-nitrobenzaldehyde in

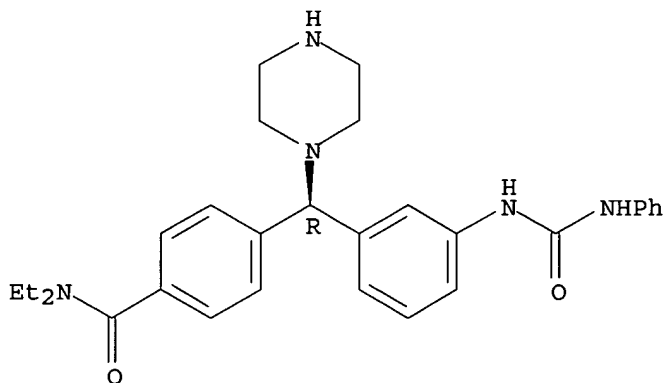
the presence of BuLi in THF to give 4-[hydroxy(3-nitrophenyl)methyl]-N,N-diethylbenzamide (50%). Reaction with thionyl bromide in CH<sub>2</sub>Cl<sub>2</sub>, followed by substitution with piperazine in MeCN and enantiomeric separation using di-p-toluoyl-D-tartaric acid, afforded N,N-diethyl-4-[(S)-(3-nitrophenyl)(1-piperazinyl)methyl]benzamide. N-protection with di-tert-Bu dicarbonate, alkylation with 2-thiazolecarboxaldehyde in the presence of Na triacetoxyborohydride in ClCH<sub>2</sub>CH<sub>2</sub>Cl, and deprotection using TFA gave (S)-II. In binding assays using human 293S cells expressing cloned human opioid receptors and neomycin resistance, most compds. of the invention exhibited activity toward the  $\delta$  receptor with IC<sub>50</sub> values in the range of 0.15 nM - 30.4 nM with an average of 2.30 nM. Exemplified compds. also showed some activity toward the  $\kappa$  and  $\mu$  receptors with IC<sub>50</sub> values in the ranges of 320 nM - 8457 nM and 16 nM - 9560 nM, resp. Thus, I and their pharmaceutical compns. are useful in therapy, in particular for the treatment of gastrointestinal disorders, anxiety, or pain (no data).

IT 691878-90-7P, (R)-4-[[3-[(Anilinocarbonyl)amino]phenyl](piperazin-1-yl)methyl]-N,N-diethylbenzamide trifluoroacetate (1:2)  
 RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
 ( $\delta$  receptor agonist; preparation of (phenylpiperazinylmethyl)benzamide  
 s as  $\delta$  receptor agonists for treatment of pain, anxiety, or  
 gastrointestinal disorders)  
 RN 691878-90-7 HCAPLUS  
 CN Benzamide, N,N-diethyl-4-[(R)-[3-[[[(phenylamino)carbonyl]amino]phenyl]-1-piperazinylmethyl]-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

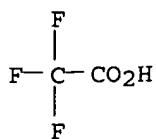
CRN 691878-12-3  
 CMF C29 H35 N5 O2

Absolute stereochemistry. Rotation (-).



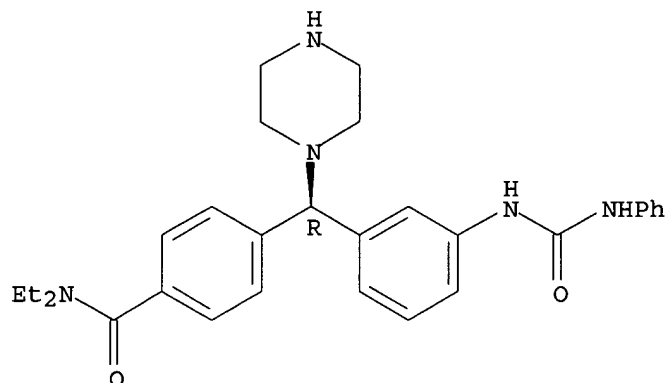
CM 2

CRN 76-05-1  
 CMF C2 H F3 O2



IT 691878-12-3P, (R)-4-[[3-[(Anilinocarbonyl)amino]phenyl] (piperazin-1-yl)methyl]-N,N-diethylbenzamide  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (δ receptor agonist; preparation of (phenylpiperazinylmethyl)benzamide s as δ receptor agonists for treatment of pain, anxiety, or gastrointestinal disorders)  
 RN 691878-12-3 HCAPLUS  
 CN Benzamide, N,N-diethyl-4-[(R)-[3-[[[(phenylamino)carbonyl]amino]phenyl]-1-piperazinylmethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L15 ANSWER 13 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2004:412920 HCAPLUS  
 DOCUMENT NUMBER: 140:423590  
 TITLE: Preparation of 4-(phenylpiperidin-4-ylidenemethyl)benzamides for treatment of pain, anxiety, or gastrointestinal disorders  
 INVENTOR(S): Brown, William; Griffin, Andrew  
 PATENT ASSIGNEE(S): Astrazeneca AB, Swed.  
 SOURCE: PCT Int. Appl., 96 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004041784	A1	20040521	WO 2003-SE1705	20031105
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,				

LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ,  
 OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
 TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,  
 BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
 ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,  
 TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  
 EP 1567496 A1 20050831 EP 2003-759165 20031105  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK  
 US 2006014789 A1 20060119 US 2005-533838 20050504  
 PRIORITY APPLN. INFO.: SE 2002-3301 A 20021107  
 WO 2003-SE1705 W 20031105  
 OTHER SOURCE(S): MARPAT 140:423590  
 GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Title compds. I [wherein R1 = (un)substituted alkyl, cycloalkyl(alkyl), (hetero)aryl, R8CO, R8SO2, R8SO, R8NHCO, R8CS, or R8NHCS; ; R2 = H or (un)substituted alkyl; R3 = H or (un)substituted alkoxy carbonyl, alkyl, or cycloalkyl(alkyl); R8 = (un)substituted alkyl, (hetero)aryl(alkyl), or cycloalkyl(alkyl); or pharmaceutically acceptable salts thereof] were prepared as opioid  $\delta$  receptor ligands. For example, reaction of 4-(bromomethyl)benzoic acid Me ester with P(OMe)<sub>3</sub>, followed by addition of 1-(tert-butoxycarbonyl)-4-piperidone in the presence of LDA in THF, gave 4-(4-methoxycarbonylbenzylidene)piperidine-1-carboxylic acid tert-Bu ester (35%). Addition of Br<sub>2</sub> (78%) and reaction with NaOH in MeOH provided 4-[bromo(4-carboxyphenyl)methylene]piperidine-1-carboxylic acid tert-Bu ester (87%). Conversion to the benzoyl chloride with iso-Bu chloroformate and amidation (73%) with Et<sub>2</sub>NH in the presence of TEA in CH<sub>2</sub>Cl<sub>2</sub>, followed by coupling with 3-aminophenylboronic acid using Pd(PPh<sub>3</sub>)<sub>4</sub> and Na<sub>2</sub>CO<sub>3</sub> in toluene/EtOH/H<sub>2</sub>O afforded N,N-diethyl-4-[(3-aminophenyl)(piperidin-4-ylidene)methyl]benzamide (97%). Alkylation of the amine with benzaldehyde and NaBH(OAc)<sub>3</sub> in 1,2-dichloroethane gave II. In binding assays using human 293S cells expressing cloned human opioid receptors and neomycin resistance, most compds. of the invention exhibited activity toward the  $\delta$  receptor with IC<sub>50</sub> values in the range of 0.14 nM - 31.2 nM. Exemplified compds. also showed some activity toward the  $\kappa$  and  $\mu$  receptors with IC<sub>50</sub> values in the ranges of 36 nM - 9680 nM and 3 nM - 5975 nM, resp. Thus, I and their pharmaceutical compns. are useful in therapy, in particular for the treatment of gastrointestinal disorders, anxiety, or pain (no data).

IT 692246-10-9P 692246-14-3P 692247-11-3P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
 ( $\delta$  receptor agonist; preparation of (phenylpiperidinyldenemethyl)benz amides as  $\delta$  receptor agonists for treatment of pain, anxiety, or gastrointestinal disorders)

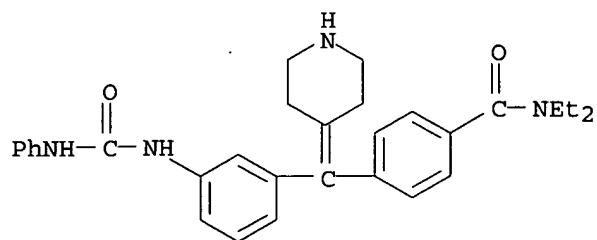
RN 692246-10-9 HCAPLUS

CN Benzamide, N,N-diethyl-4-[[3-[[[(phenylamino)carbonyl]amino]phenyl]-4-piperidinyldenemethyl]-, trifluoroacetate (5:7) (9CI) (CA INDEX NAME)

CM 1

CRN 692246-08-5

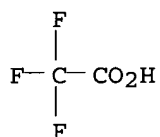
CMF C30 H34 N4 O2



CM 2

CRN 76-05-1

CMF C2 H F3 O2



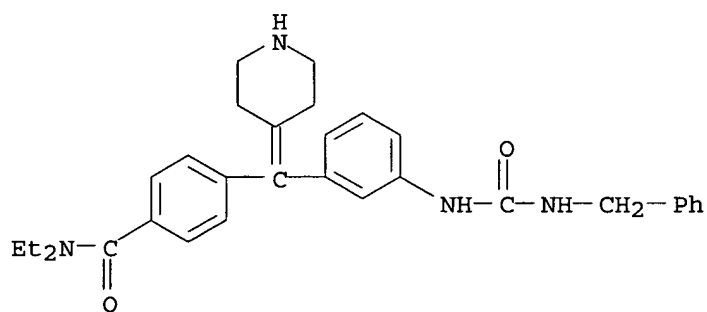
RN 692246-14-3 HCAPLUS

CN Benzamide, N,N-diethyl-4-[[3-[[[(phenylmethyl)amino]carbonyl]amino]phenyl]-4-piperidinyldenemethyl]-, trifluoroacetate (5:7) (9CI) (CA INDEX NAME)

CM 1

CRN 692246-12-1

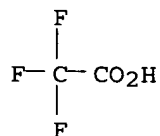
CMF C31 H36 N4 O2



CM 2

CRN 76-05-1

CMF C2 H F3 O2

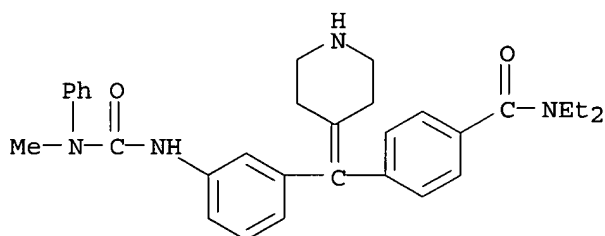


RN 692247-11-3 HCAPLUS  
CN Benzamide, N,N-diethyl-4-[[3-[[[(methylphenylamino)carbonyl]amino]phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (5:9) (9CI) (CA INDEX NAME)

CM 1

CRN 692247-09-9

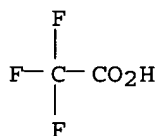
CMF C31 H36 N4 O2



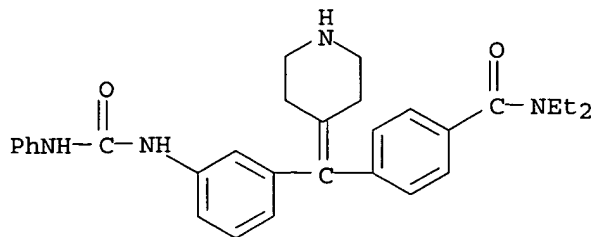
CM 2

CRN 76-05-1

CMF C2 H F3 O2

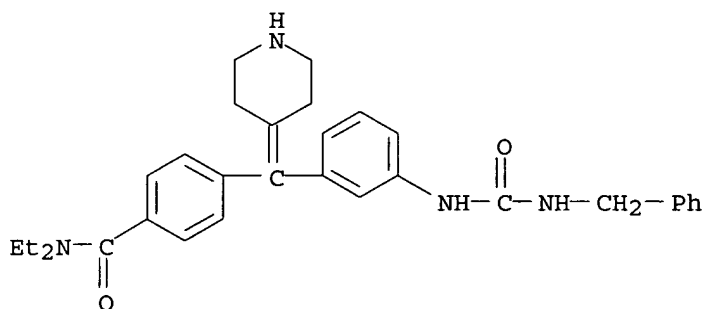


IT **692246-08-5P**, 4-[[3-[(Anilinocarbonyl)amino]phenyl](piperidin-4-ylidene)methyl]-N,N-diethylbenzamide **692246-12-1P**, 4-[[3-[[[(Benzylamino)carbonyl]amino]phenyl](piperidin-4-ylidene)methyl]-N,N-diethylbenzamide **692247-09-9P**, N,N-Diethyl-4-[[3-[[[methyl(phenyl)amino]carbonyl]amino]phenyl]-4-piperidinylidenemethyl]benzamide  
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
( $\delta$  receptor agonist; preparation of (phenylpiperidinylidenemethyl)benz amides as  $\delta$  receptor agonists for treatment of pain, anxiety, or gastrointestinal disorders)  
RN 692246-08-5 HCAPLUS  
CN Benzamide, N,N-diethyl-4-[[3-[[[(phenylamino)carbonyl]amino]phenyl]-4-piperidinylidenemethyl]- (9CI) (CA INDEX NAME)



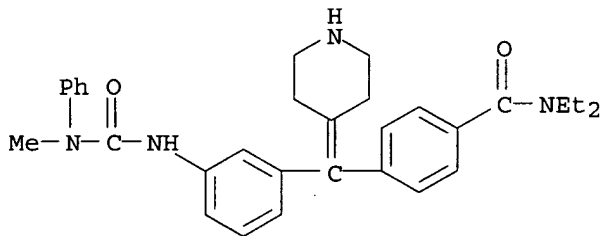
RN 692246-12-1 HCAPLUS

CN Benzamide, N,N-diethyl-4-[[3-[[[(phenylmethyl)amino]carbonyl]amino]phenyl]-4-piperidinylidenemethyl]- (9CI) (CA INDEX NAME)



RN 692247-09-9 HCAPLUS

CN Benzamide, N,N-diethyl-4-[[3-[[[(methylphenylamino)carbonyl]amino]phenyl]-4-piperidinylidenemethyl]- (9CI) (CA INDEX NAME)



L15 ANSWER 14 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:393750 HCAPLUS

DOCUMENT NUMBER: 141:199981

TITLE: Novel dual acting molecules possessing 5-lipoxygenase enzyme inhibition and histamine H1 receptor antagonist properties

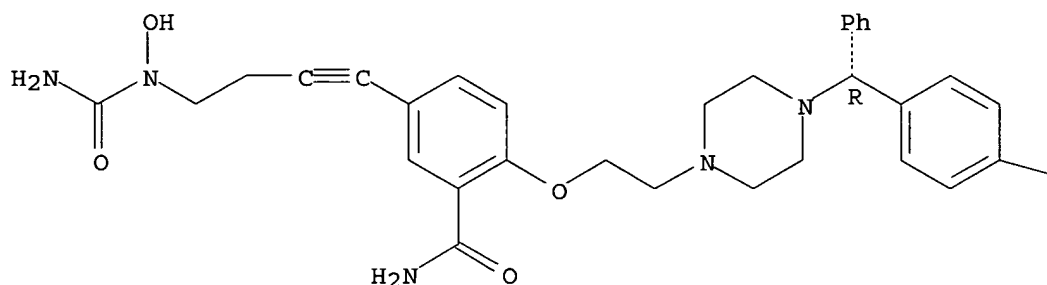
AUTHOR(S): Scannell, R. T.; Arrington, M. P.; Bayless, L.; Cai, X.; Eckman, J. B.; Eckert, M.; Ene, D. G.; Ellis, J. L.; Hussoin, S.; Latham, G. M.; Lewis, T. A.; Libertine, L.; Nicolas, J.; Selig, W. M.; Schwartz, C. E.; Wels, B. F.; Wypij, D. M.; Young, M. A.; Zou, D.

CORPORATE SOURCE: UCB Research, Inc., Cambridge, MA, 02139, USA  
SOURCE: Inflammation Research (2004), 53(Suppl. 1), S33-S34  
CODEN: INREFB; ISSN: 1023-3830

PUBLISHER: Birkhaeuser Verlag  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Novel dual acting mols. possessing 5-lipoxygenase inhibition and histamine H1 receptor antagonist properties are described.  
 IT 299460-62-1, UCB 35440  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (dual acting mols. possessing lipoxygenase inhibition and histamine H1 receptor antagonist properties)  
 RN 299460-62-1 HCAPLUS  
 CN Benzamide, 5-[4-[(aminocarbonyl)hydroxyamino]-1-butynyl]-2-[2-[4-[(R)-(4-chlorophenyl)phenylmethyl]-1-piperazinyl]ethoxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

—Cl

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 15 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2004:303304 HCAPLUS  
 DOCUMENT NUMBER: 141:46752  
 TITLE: 5-Lipoxygenase inhibitors with histamine H1 receptor antagonist activity  
 AUTHOR(S): Lewis, Timothy A.; Bayless, Lynn; Eckman, Joseph B.; Ellis, James L.; Grewal, Gurmit; Libertine, Lyn; Nicolas, Jean Marie; Scannell, Ralph T.; Wels, Bruce F.; Wenberg, Karen; Wypij, Donna M.  
 CORPORATE SOURCE: UCB Research, Cambridge, MA, 02139, USA  
 SOURCE: Bioorganic & Medicinal Chemistry Letters (2004), 14(9), 2265-2268  
 CODEN: BMCLE8; ISSN: 0960-894X  
 PUBLISHER: Elsevier Science B.V.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English



OTHER SOURCE(S): CASREACT 141:46752

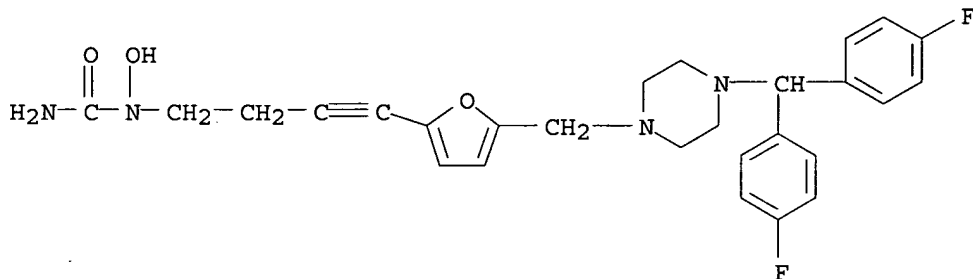
AB A series of novel compds. with both 5-lipoxygenase (5-LO) inhibitory and histamine H1 receptor antagonist activity were designed for the treatment of asthma. These dual-function compds. were made by connecting 5-LO and H1 pharmacophores, N-hydroxyureas and benzhydryl piperazines, resp. A range of in vitro activities was observed, with the furan analog 10 demonstrating both activities in an animal model. The activities observed were compared to single-function drugs.

IT 299460-61-0P 299460-73-4P 299460-87-0P  
299461-08-8P 708263-49-4P 708263-50-7P  
708263-51-8P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(5-Lipoxygenase inhibitors with histamine H1 receptor antagonist activity)

RN 299460-61-0 HCAPLUS

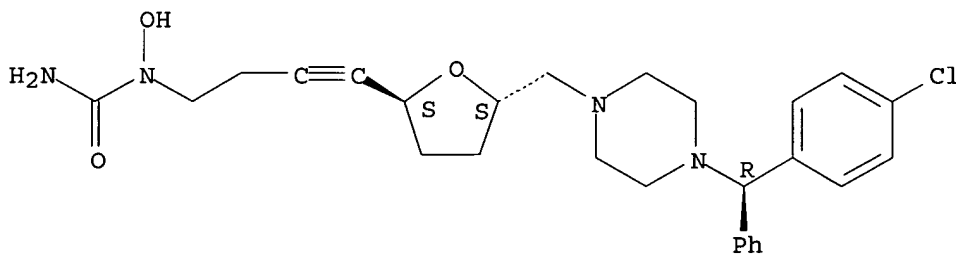
CN Urea, N-[4-[5-[[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]methyl]-2-furanyl]-3-butynyl]-N-hydroxy- (9CI) (CA INDEX NAME)



RN 299460-73-4 HCAPLUS

CN Urea, N-[4-[(2S,5S)-5-[[4-[(R)-(4-chlorophenyl)phenylmethyl]-1-piperazinyl]methyl]tetrahydro-2-furanyl]-3-butynyl]-N-hydroxy- (9CI) (CA INDEX NAME)

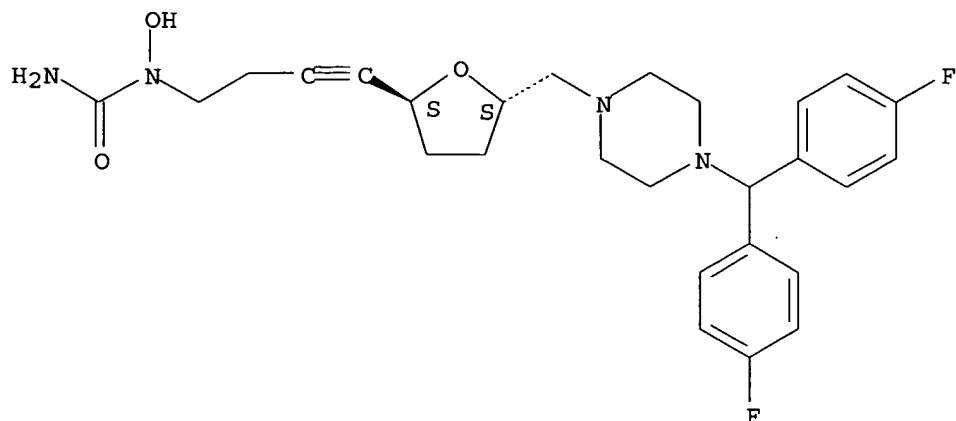
Absolute stereochemistry.



RN 299460-87-0 HCAPLUS

CN Urea, N-[4-[(2S,5S)-5-[[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]methyl]tetrahydro-2-furanyl]-3-butynyl]-N-hydroxy- (9CI) (CA INDEX NAME)

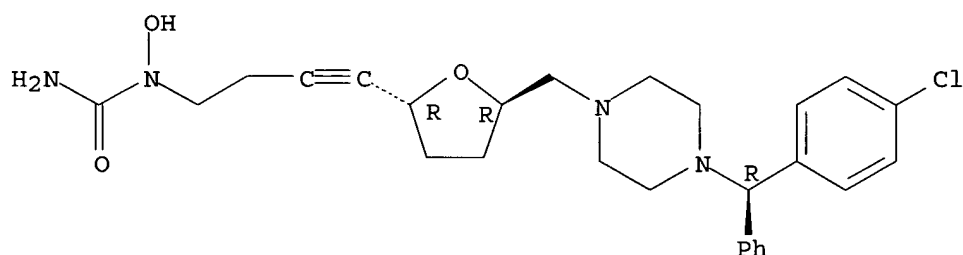
Absolute stereochemistry.



RN 299461-08-8 HCAPLUS

CN Urea, N-[4-[(2R,5R)-5-[[4-[(R)-(4-chlorophenyl)phenylmethyl]-1-piperazinyl]methyl]tetrahydro-2-furanyl]-3-butynyl]-N-hydroxy- (9CI) (CA INDEX NAME)

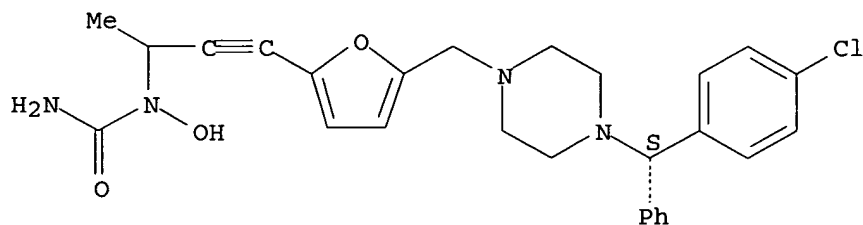
Absolute stereochemistry.



RN 708263-49-4 HCAPLUS

CN Urea, N-[3-[5-[[4-[(S)-(4-chlorophenyl)phenylmethyl]-1-piperazinyl]methyl]-2-furanyl]-1-methyl-2-propynyl]-N-hydroxy- (9CI) (CA INDEX NAME)

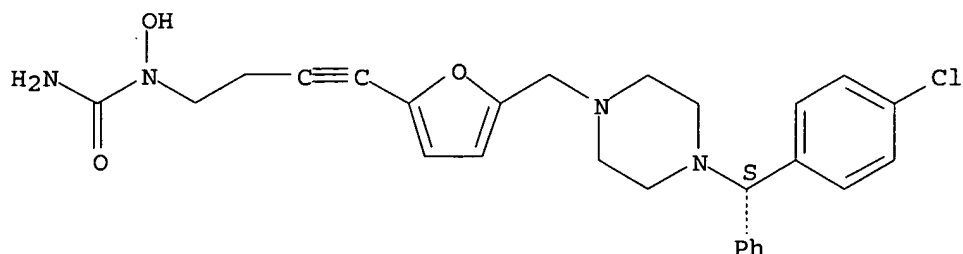
Absolute stereochemistry.



RN 708263-50-7 HCAPLUS

CN Urea, N-[4-[5-[[4-[(S)-(4-chlorophenyl)phenylmethyl]-1-piperazinyl]methyl]-2-furanyl]-3-butynyl]-N-hydroxy- (9CI) (CA INDEX NAME)

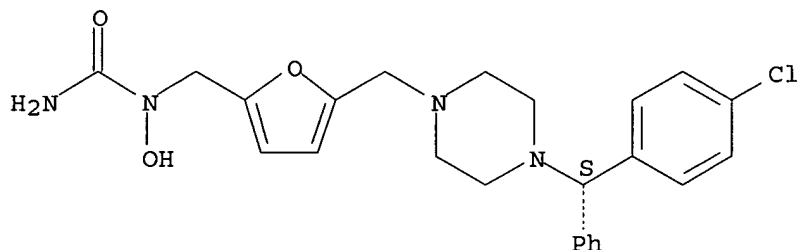
Absolute stereochemistry.



RN 708263-51-8 HCAPLUS

CN Urea, N-[[5-[[4-[(S)-(4-chlorophenyl)phenylmethyl]-1-piperazinyl]methyl]-2-furanyl]methyl]-N-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 16 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:41277 HCAPLUS

DOCUMENT NUMBER: 140:87701

TITLE: Diarylmethylpiperazines as prophylactic or therapeutic agents for viral myocarditis

INVENTOR(S): Matsumori, Akira; Kouzan, Serge

PATENT ASSIGNEE(S): UCB, S.A., Belg.

SOURCE: PCT Int. Appl., 26 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004004728	A1	20040115	WO 2003-EP6746	20030626
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
JP 2004035448	A2	20040205	JP 2002-193896	20020702

JP 2004035450 A2 20040205 JP 2002-193901 20020702  
EP 1521581 A1 20050413 EP 2003-762520 20030626

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

PRIORITY APPLN. INFO.:

JP 2002-193896 A 20020702  
JP 2002-193901 A 20020702  
WO 2003-EP6746 W 20030626

AB The invention provides a prophylactic or therapeutic agent for viral myocarditis and viral myocarditis-related viral diseases by preventing or treating the occurrence of cell damage in various organs regardless of the type of virus. A prophylactic or therapeutic agent for viral myocarditis and viral myocarditis-related viral diseases is provided that comprises as an active ingredient 2-[4-(diphenylmethyl)-1-piperazinyl]acetic acid, or an amide derivative, individual optical isomer, or pharmaceutically acceptable salt thereof.

IT 299460-48-3 642928-01-6

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

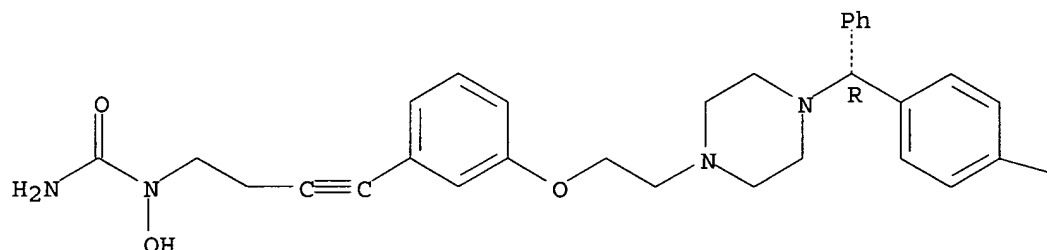
(diarylmethylpiperazines as prophylactic or therapeutic agents for viral myocarditis)

RN 299460-48-3 HCAPLUS

CN Urea, N-[4-[3-[2-[4-[(R)-(4-chlorophenyl)phenylmethyl]-1-piperazinyl]ethoxy]phenyl]-3-butynyl]-N-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

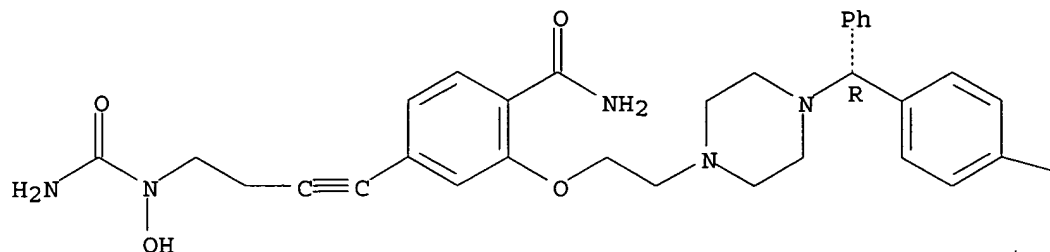
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RN 642928-01-6 HCAPLUS

CN Benzamide, 4-[4-[(aminocarbonyl)hydroxyamino]-1-butynyl]-2-[2-[4-[(R)-(4-chlorophenyl)phenylmethyl]-1-piperazinyl]ethoxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

Cl

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 17 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:737723 HCAPLUS

DOCUMENT NUMBER: 139:261309

TITLE: Preparation of N-hydroxy-5-piperazino(piperidino or diazepino)-2-pyrimidinecarboxamides and N-hydroxy-4-piperazino(piperidino or diazepino)benzamides as new inhibitors of histone deacetylase

INVENTOR(S): Angibaud, Patrick Rene; Pilatte, Isabelle Noelle Constance; Van Brandt, Sven Franciscus Anna; Roux, Bruno; Ten Holte, Peter; Verdonck, Marc Gustaaf Celine; Meerpoel, Lieven; Dyatkin, Alexey Borisovich

PATENT ASSIGNEE(S): Janssen Pharmaceutica N.V., Belg.

SOURCE: PCT Int. Appl., 72 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

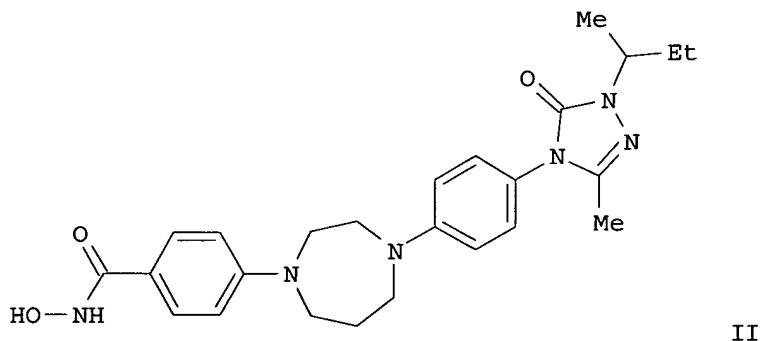
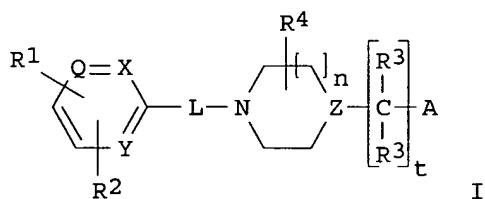
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 8

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003076400	A1	20030918	WO 2003-EP2514	20030311
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

CA 2475764	AA	20030918	CA 2003-2475764	20030311
AU 2003218736	A1	20030922	AU 2003-218736	20030311
EP 1485353	A1	20041215	EP 2003-711980	20030311
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003008081	A	20041221	BR 2003-8081	20030311
US 2005107384	A1	20050519	US 2003-506998	20030311
NZ 534834	A	20050729	NZ 2003-534834	20030311
JP 2005526067	T2	20050902	JP 2003-574621	20030311
NO 2004004194	A	20041001	NO 2004-4194	20041001
PRIORITY APPLN. INFO.:			US 2002-363799P	P 20020313
			WO 2003-EP2514	W 20030311
OTHER SOURCE(S):	MARPAT 139:261309			
GI				



AB The title compds. [I; n = 0-3; t = 0-4; Q, X, Y = N, C; Z = N, CH; R1 = CONR7R8, NHCOR9, CO(alkanediyl)SR9, etc. (wherein R7, R8 = H, OH, alkyl, etc.; R9 = H, alkyl, alkylcarbonyl, etc.); R2 = H, halo, OH, etc.; L = a bond, alkanediyl, alkanediyloxy, NH, CO, NHCO; each R3 = H and one H atom can be replaced by aryl; R4 = H, OH, NH2, etc.; A = (un)substituted Ph, cyclohexyl, pyridyl, etc.], having histone deacetylase inhibiting enzymic activity, were prepared and formulated. E.g., a multi-step synthesis of II which showed pIC50 of 5.121 against HDAC, was given.

IT **603986-62-5P**

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of piperazino(piperidino or diazepino) substituted 2-pyrimidinecarboxylic acids and N-hydroxybenzamides as new inhibitors of histone deacetylase)

RN 603986-62-5 HCAPLUS

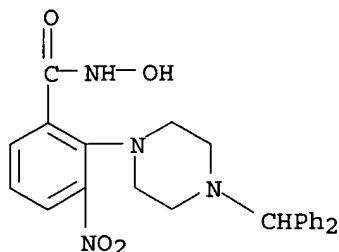
CN Benzamide, 2-[4-(diphenylmethyl)-1-piperazinyl]-N-hydroxy-3-nitro-,

bis(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 603986-61-4

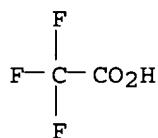
CMF C24 H24 N4 O4



CM 2

CRN 76-05-1

CMF C2 H F3 O2



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 18 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:282524 HCAPLUS

DOCUMENT NUMBER: 138:304064

TITLE: Preparation of phenylurea derivatives as vanilloid receptor agonists

INVENTOR(S): Matsumoto, Takahiro; Yamamoto, Masataka; Nagabukuro, Hiroshi; Mochizuki, Manabu

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan

SOURCE: PCT Int. Appl., 293 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

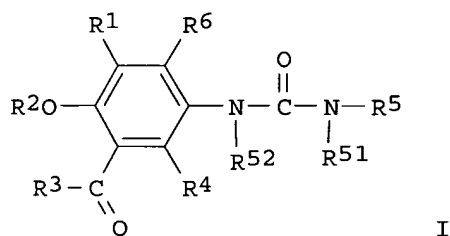
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003029199	A1	20030410	WO 2002-JP9995	20020927
WO 2003029199	C2	20030925		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA,

UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,  
 FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF,  
 CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  
 EP 1437344 A1 20040714 EP 2002-768103 20020927  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK  
 JP 2004339061 A2 20041202 JP 2002-282514 20020927  
 US 2004259912 A1 20041223 US 2004-489621 20040312  
 PRIORITY APPLN. INFO.: JP 2001-300564 A 20010928  
 WO 2002-JP9995 W 20020927  
 OTHER SOURCE(S): MARPAT 138:304064  
 GI



AB The title compds. I [R1, R4 and R6 are each independently hydrogen, halogeno, or hydrocarbyl; R2 is hydrocarbyl or a heterocyclic group; R3 is hydrocarbyl, etc.; R5 is hydrocarbyl or a heterocyclic group (except quinolyl) and R51 is hydrogen or hydrocarbyl, or R5 and R51 together with the nitrogen atom adjacent thereto may form a ring; and R52 is hydrogen or hydrocarbyl] are prepared I are useful for the treatment of pain, urinary incontinence, etc. In a tail flick test using mice, one compound of this invention showed a min. ED of 1 mg/kg.

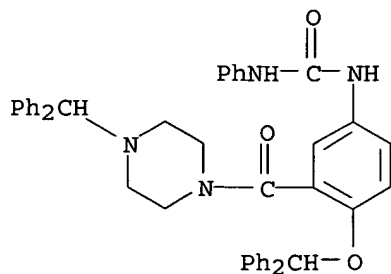
IT 508217-19-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of phenylurea derivs. as vanilloid receptor agonists)

RN 508217-19-4 HCAPLUS

CN Piperazine, 1-[2-(diphenylmethoxy)-5-[[ (phenylamino) carbonyl] amino] benzoyl]-4-(diphenylmethyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS



RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 19 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:43028 HCAPLUS

DOCUMENT NUMBER: 138:106596

TITLE: Preparation of thiophenedicarboxamides and related compounds as histone deacetylase (HDAC) inhibitors.

INVENTOR(S): Leser-Reiff, Ulrike; Sattelkau, Tim; Zimmermann, Gerd

PATENT ASSIGNEE(S): Hoffman-La Roche, Inc., Germany

SOURCE: U.S. Pat. Appl. Publ., 19 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003013757	A1	20030116	US 2002-167677	20020611
US 6784173	B2	20040831		
CA 2449804	AA	20030213	CA 2002-2449804	20020613
WO 2003011851	A2	20030213	WO 2002-EP6488	20020613
WO 2003011851	A3	20030918		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1401824	A2	20040331	EP 2002-791436	20020613
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
CN 1516697	A	20040728	CN 2002-812010	20020613
BR 2002010424	A	20040817	BR 2002-10424	20020613
NZ 529874	A	20041224	NZ 2002-529874	20020613
JP 2005502641	T2	20050127	JP 2003-517043	20020613
ZA 2003009260	A	20050228	ZA 2003-9260	20031127
BG 108450	A	20050131	BG 2003-108450	20031215
US 2004214862	A1	20041028	US 2004-847166	20040517
PRIORITY APPLN. INFO.:			EP 2001-114496	A 20010615
			US 2002-167677	A3 20020611
			WO 2002-EP6488	W 20020613

OTHER SOURCE(S): MARPAT 138:106596

AB HONHCOACONR1R2 [A = (substituted) Ph, thienyl; R1, R2 = H, (substituted) alkyl, carbocyclyl, heterocyclyl; NR1R2 = (substituted) 3-6 membered ring], were prepared Thus, thiophene-2,5-dicarboxylic acid monomethyl ester and N-methylmorpholine in CH<sub>2</sub>Cl<sub>2</sub> at -10° were treated with 1-aminomethylnaphthalene in CH<sub>2</sub>Cl<sub>2</sub>; the mixture was stirred 90 min to give 58% monoamide. This was stirred with NH<sub>2</sub>OH.HCl and NaOMe in MeOH for 4 h to give thiophene-2,5-dicarboxylic acid 2-hydroxyamide 5-[(naphthalen-1-ylmethyl)amide]. Tested title compds. inhibited HT-29 tumor cell growth with IC<sub>50</sub> = 0.02-0.17 µM. A tablet formulation is given.

IT 487002-92-6P 487004-50-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

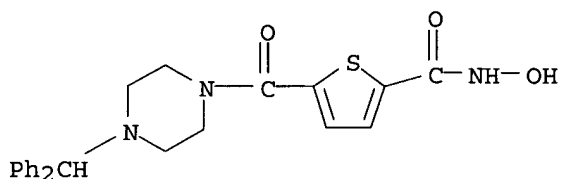
(Uses)

(claimed compound; preparation of thiophenedicarboxamides and related compds.

as histone deacetylase (HDAC) inhibitors)

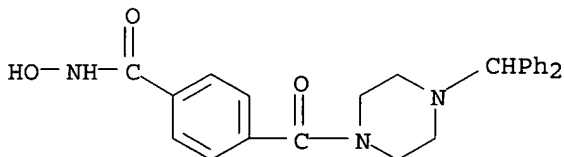
RN 487002-92-6 HCAPLUS

CN 2-Thiophenecarboxamide, 5-[[4-(diphenylmethyl)-1-piperazinyl]carbonyl]-N-hydroxy- (9CI) (CA INDEX NAME)



RN 487004-50-2 HCAPLUS

CN Benzamide, 4-[[4-(diphenylmethyl)-1-piperazinyl]carbonyl]-N-hydroxy- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 20 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:385004 HCAPLUS

DOCUMENT NUMBER: 136:386137

TITLE: Preparation of piperidinylpiperazines as CCR5 chemokine receptor antagonists.

INVENTOR(S): Baroudy, Bahige M.; Clader, John W.; Josien, Hubert B.; McCombie, Stuart W.; McKittrick, Brian A.; Miller, Michael W.; Neustadt, Bernard R.; Palani, Anandan; Smith, Elizabeth M.; Steensma, Ruof; Tagat, Jayaram R.; Vice, Susan F.; Gilbert, Eric; Labroli, Marc A.

PATENT ASSIGNEE(S): Schering Corporation, USA

SOURCE: U.S., 72 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

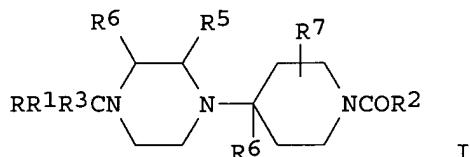
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

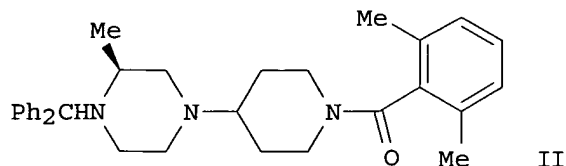
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6391865	B1	20020521	US 2000-562814	20000501
US 2003069252	A1	20030410	US 2002-61011	20020130
US 6689765	B2	20040210		
US 2004067961	A1	20040408	US 2003-668862	20030923
PRIORITY APPLN. INFO.:			US 1999-132509P	P 19990504
			US 2000-562814	A3 20000501

OTHER SOURCE(S) :  
GI

MARPAT 136:386137



I



II

AB Title compds. [I; R = (substituted) Ph, pyridyl, thienyl, naphthyl; R1 = H, alkyl; R2 = (substituted) Ph, heteroaryl, naphthyl, fluorenyl, diphenylmethyl, (substituted) phenylalkyl, heteroarylalkyl; R3 = H, alkyl, alkoxyalkyl, cycloalkyl, cycloalkylalkyl, (substituted) Ph, phenylalkyl, naphthyl, naphthylalkyl, heteroaryl, heteroarylalkyl; R4, R5, R7 = H, alkyl; R6 = H, alkyl, alkenyl], were prepared Thus, title compound (II) [preparation starting from (S)-alanine Me ester hydrochloride given] inhibited RANTES binding in a CCR5 membrane binding assay with  $K_i = 9.97$  nM.

IT 306296-55-9P 306296-59-3P

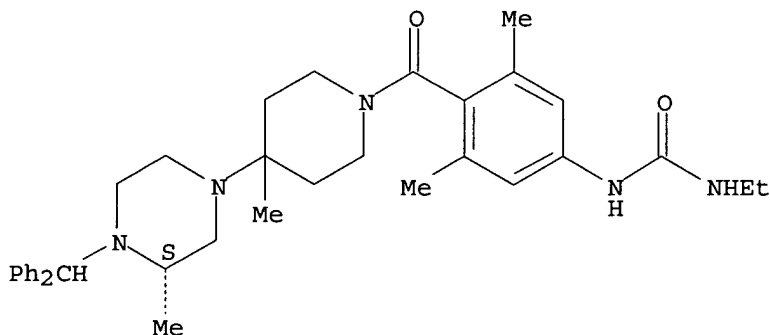
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of piperazine derivs. useful as CCR5 antagonists)

RN 306296-55-9 HCAPLUS

CN Piperidine, 4-[(3S)-4-(diphenylmethyl)-3-methyl-1-piperazinyl]-1-[4-[[[(ethylamino)carbonyl]amino]-2,6-dimethylbenzoyl]-4-methyl- (9CI) (CA INDEX NAME)

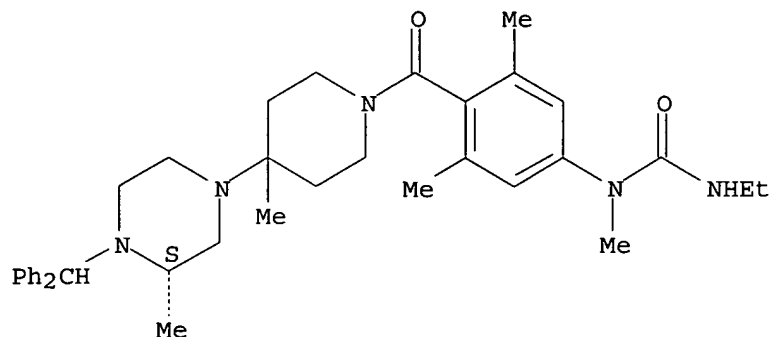
Absolute stereochemistry.



RN 306296-59-3 HCAPLUS

CN Piperidine, 4-[(3S)-4-(diphenylmethyl)-3-methyl-1-piperazinyl]-1-[4-[[[(ethylamino)carbonyl]methylamino]-2,6-dimethylbenzoyl]-4-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

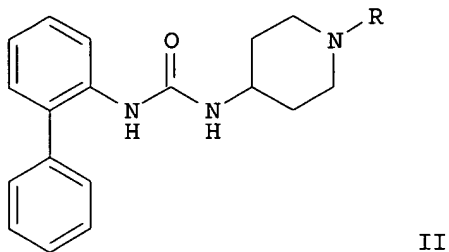
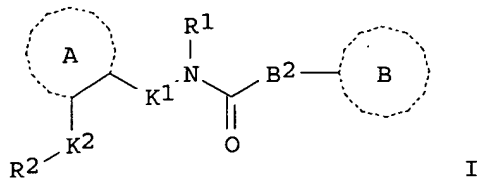


REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 21 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2002:315471 HCAPLUS  
 DOCUMENT NUMBER: 136:325431  
 TITLE: Preparation of 2-biphenyl 4-piperidinyl ureas having muscarinic receptor antagonist activity  
 INVENTOR(S): Mammen, Mathai; Oare, David  
 PATENT ASSIGNEE(S): Theravance, Inc., USA  
 SOURCE: U.S. Pat. Appl. Publ., 69 pp., Cont.-in-part of U. S. Ser. No.456,170, abandoned.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 31  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002049195	A1	20020425	US 2000-732514	20001207
US 6635764	B2	20031021		
US 6693202	B1	20040217	US 2000-645609	20000825
EP 1457488	A1	20040915	EP 2004-12859	20001207
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
ES 2225275	T3	20050316	ES 2000-982493	20001207
ES 2243333	T3	20051201	ES 2000-983991	20001207
ZA 2002004553	A	20030908	ZA 2002-4553	20020606
ZA 2002004557	A	20030908	ZA 2002-4557	20020606
US 2004110229	A1	20040610	US 2003-425368	20030429
US 2004054187	A1	20040318	US 2003-426364	20030430
US 2004116706	A1	20040617	US 2003-426270	20030430
PRIORITY APPLN. INFO.:			US 1999-456170	B2 19991207
			US 1999-120287P	<u>P 19990216</u>
			US 1999-325725	<del>B2 19990604</del>
			US 2000-645609	A1 20000825
			EP 2000-982493	A3 20001207
			US 2000-732514	A1 20001207

OTHER SOURCE(S): MARPAT 136:325431  
 GI



AB The title compds. L1XL2 [L1 = I (wherein A = (hetero)aryl; B2 = NRA; Ra = H, alkyl, etc.; R1 = H, alkyl; R2 = heteroaryl, etc.; K1 = a bond, alkylene; K2 = a bond, CO, SOn, etc.; n = 0-2; B = heterocycloamino, heteroarylamino); X = a linker; L2 = an organic group comprising at least one primary, secondary, or tertiary amine] which are muscarinic receptor antagonists and agonists (biol. data given), were prepared and formulated. E.g., a 2-step preparation of the intermediate II [R = H] starting with biphenyl-2-isocyanate and 4-amino-N-benzylpiperidine, was given. Mass spec data for 643 compds. II [R = XL2] such as II [X = CH2CH(OH)CH2; L2 = 4-[2-(N-phenyl-N-methylamino)-2-oxoethyl]piperazin-1-yl], were presented.

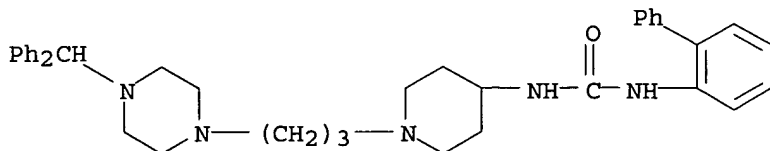
IT **344430-17-7P 344431-84-1P 344434-88-4P**

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 2-biphenyl 4-piperidinyl ureas having muscarinic receptor antagonist activity)

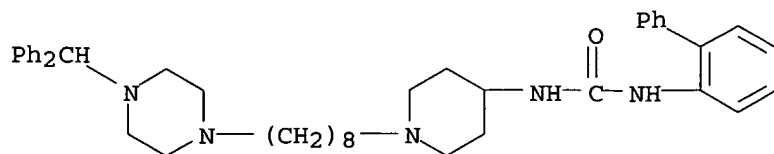
RN 344430-17-7 HCAPLUS

CN Urea, N-[1,1'-biphenyl]-2-yl-N'-[1-[3-[4-(diphenylmethyl)-1-piperazinyl]propyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)



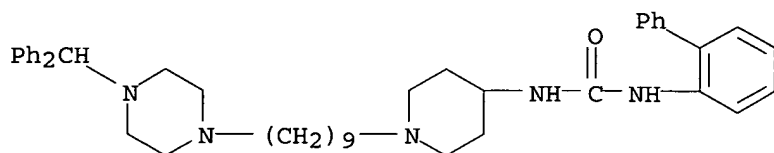
RN 344431-84-1 HCAPLUS

CN Urea, N-[1,1'-biphenyl]-2-yl-N'-[1-[8-[4-(diphenylmethyl)-1-piperazinyl]octyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)



RN 344434-88-4 HCAPLUS

CN Urea, N-[1,1'-biphenyl]-2-yl-N'-[1-[9-[4-(diphenylmethyl)-1-piperazinyl]nonyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)



L15 ANSWER 22 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:581832 HCAPLUS

DOCUMENT NUMBER: 135:166842

TITLE: Preparation of (1H-indol-5-yl)methanones, 2-(2-fluorophenyl)acetamides and 2-(pyrazol-1-yl)pyrimidines as InhA inhibitors

INVENTOR(S): Staveski, Mark M.; Sneddon, Scott F.; Yee, Christopher; Janjigian, Andrew

PATENT ASSIGNEE(S): Genzyme Corporation, USA

SOURCE: PCT Int. Appl., 56 pp.

CODEN: PIXXD2

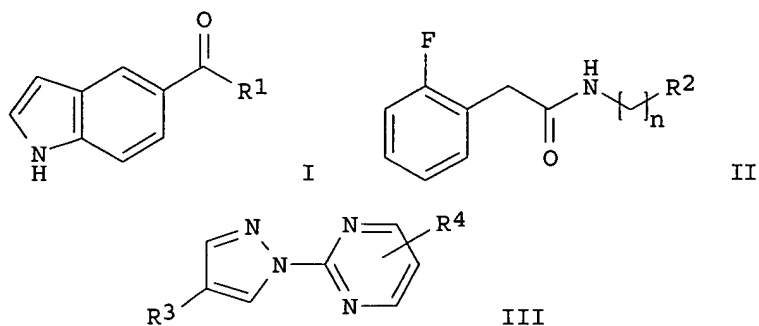
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001056974	A2	20010809	WO 2001-US40045	20010206
WO 2001056974	A3	20020718		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
US 6372752	B1	20020416	US 2000-499183	20000207
PRIORITY APPLN. INFO.:			US 2000-499183	A1 20000207
OTHER SOURCE(S):	MARPAT 135:166842			
GI				



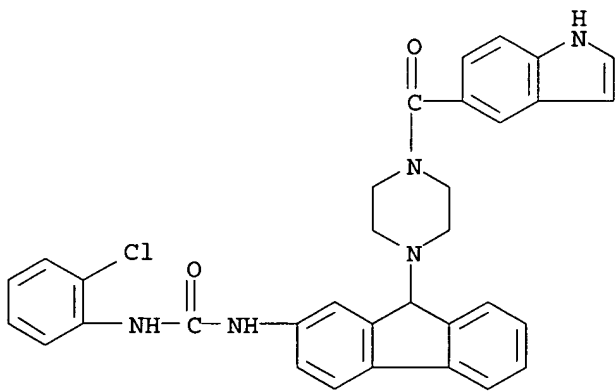
AB The title compds. [I-III, etc.; R1 = (un)substituted heteroaryl, piperazinyl, piperidinyl, etc.; R2 = OH, (un)substituted aryl, cycloalkyl, etc.; n = 1-2; R3 = (un)substituted Ph, heteroaryl; R4 = H, halo, alkyl, etc.] which inhibit the Mycobacterial enoyl-ACP reductase required for cell wall biosynthesis, and are useful for treating a bacterial infection in a patient, were prepared Thus, reacting 2-fluorophenylacetic acid with 4-chlorophenethylamine in the presence of DMAP and EDCI in CH<sub>2</sub>Cl<sub>2</sub> afforded II [R2 = 4-ClC<sub>6</sub>H<sub>4</sub>; n = 2] which showed 82% InhA inhibition at 40 μM.

IT 353522-13-1P 353522-66-4P 353522-69-7P 353522-71-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of (1H-indol-5-yl)methanones, 2-(2-fluorophenyl)acetamides and 2-(pyrazol-1-yl)pyrimidines as InhA inhibitors)

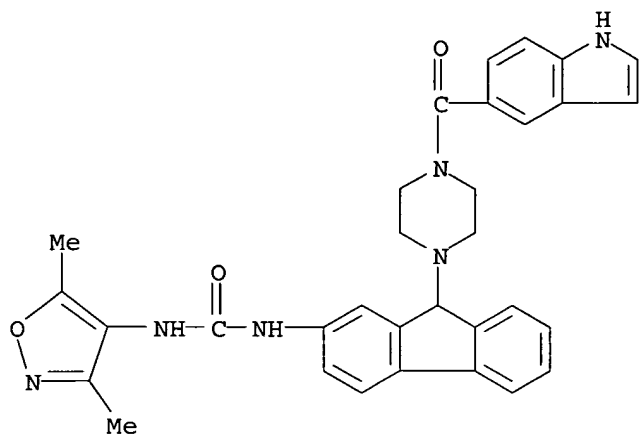
RN 353522-13-1 HCAPLUS

CN Piperazine, 1-[2-[[[(2-chlorophenyl)amino]carbonyl]amino]-9H-fluoren-9-yl]-4-(1H-indol-5-ylcarbonyl)- (9CI) (CA INDEX NAME)



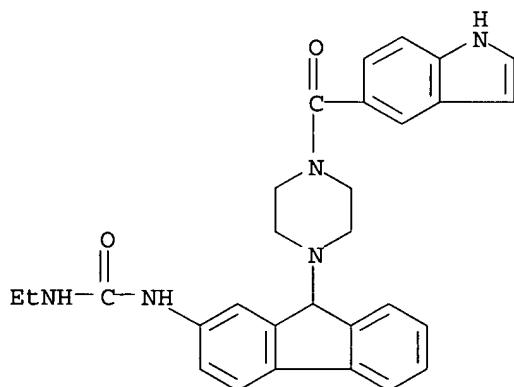
RN 353522-66-4 HCAPLUS

CN Piperazine, 1-[2-[[[(3,5-dimethyl-4-isoxazolyl)amino]carbonyl]amino]-9H-fluoren-9-yl]-4-(1H-indol-5-ylcarbonyl)- (9CI) (CA INDEX NAME)



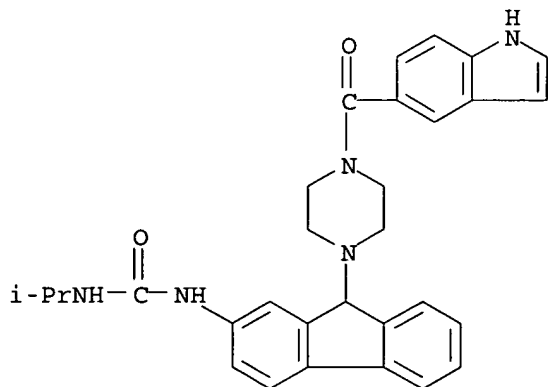
RN 353522-69-7 HCAPLUS

CN Piperazine, 1-[2-[[[(ethylamino)carbonyl]amino]-9H-fluoren-9-yl]-4-(1H-indol-5-ylcarbonyl)]- (9CI) (CA INDEX NAME)



RN 353522-71-1 HCAPLUS

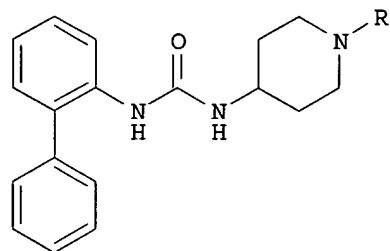
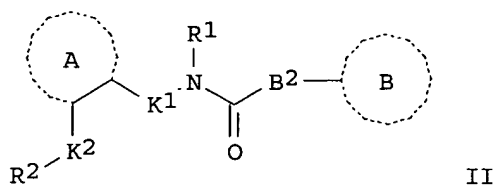
CN Piperazine, 1-(1H-indol-5-ylcarbonyl)-4-[2-[[[(1-methylethyl)amino]carbonyl]amino]-9H-fluoren-9-yl]- (9CI) (CA INDEX NAME)





L15 ANSWER 23 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2001:435045 HCAPLUS  
 DOCUMENT NUMBER: 135:46100  
 TITLE: Preparation of 2-biphenyl 4-piperidinyl ureas having  
 muscarinic receptor antagonist activity  
 INVENTOR(S): Mammen, Mathai; Oare, David  
 PATENT ASSIGNEE(S): Advanced Medicine, Inc., USA  
 SOURCE: PCT Int. Appl., 162 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 31  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001042213	A1	20010614	WO 2000-US33155	20001207
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6693202	B1	20040217	US 2000-645609	20000825
CA 2392030	AA	20010614	CA 2000-2392030	20001207
BR 2000015963	A	20020806	BR 2000-15963	20001207
EP 1235803	A1	20020904	EP 2000-982493	20001207
EP 1235803	B1	20040714		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2003516391	T2	20030513	JP 2001-543514	20001207
NZ 518722	A	20040326	NZ 2000-518722	20001207
AT 271039	E	20040715	AT 2000-982493	20001207
EP 1457488	A1	20040915	EP 2004-12859	20001207
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
ES 2225275	T3	20050316	ES 2000-982493	20001207
AU 782232	B2	20050714	AU 2001-19518	20001207
ES 2243333	T3	20051201	ES 2000-983991	20001207
NO 2002002683	A	20020702	NO 2002-2683	20020606
ZA 2002004553	A	20030908	ZA 2002-4553	20020606
ZA 2002004557	A	20030908	ZA 2002-4557	20020606
HK 1049483	A1	20050218	HK 2003-101572	20030303
US 2004110229	A1	20040610	US 2003-425368	20030429
PRIORITY APPLN. INFO.:			US 1999-456170	A2 19991207
			US 1999-120287P	P 19990216
			US 1999-325725	B2 19990604
			US 2000-645609	A1 20000825
			EP 2000-982493	A3 20001207
			WO 2000-US33155	W 20001207
OTHER SOURCE(S):			MARPAT 135:46100	
GI				



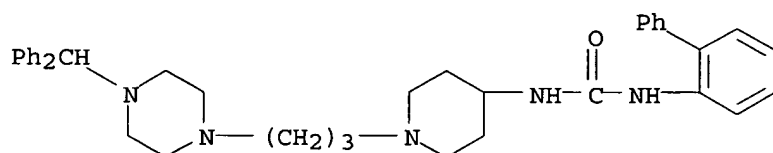
AB The title compds. L1XL2 [I; L1 = II (wherein A = (hetero)aryl; B2 = NRa; Ra = H, alkyl, etc.; R1 = H, alkyl; R2 = heteroaryl, etc.; K1 = a bond, alkylene; K2 = a bond, CO, SO<sub>n</sub>, etc.; n = 0-2; B = heterocycloamino, heteroarylamino); X = a linker; L2 = an organic group comprising at least one primary, secondary, or tertiary amine] which are muscarinic receptor antagonists and agonists (biol. data given), were prepared and formulated. E.g., a 2-step preparation of the intermediate III [R = H] starting with biphenyl-2-isocyanate and 4-amino-N-benzylpiperidine, was given. Mass spec data for 643 compds. III [R = XL2] were presented.

IT 344430-17-7P 344431-84-1P 344434-88-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of 2-biphenyl 4-piperidinyl ureas having muscarinic receptor antagonist activity)

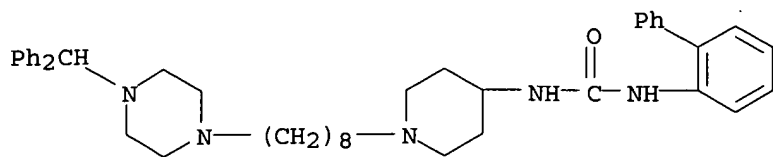
RN 344430-17-7 HCAPLUS

CN Urea, N-[1,1'-biphenyl]-2-yl-N'-[1-[3-[4-(diphenylmethyl)-1-piperazinyl]propyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)



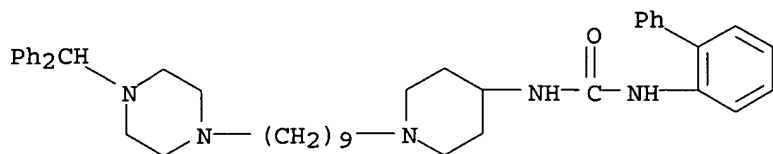
RN 344431-84-1 HCAPLUS

CN Urea, N-[1,1'-biphenyl]-2-yl-N'-[1-[8-[4-(diphenylmethyl)-1-piperazinyl]octyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)



RN 344434-88-4 HCAPLUS

CN Urea, N-[1,1'-biphenyl]-2-yl-N'-[1-[9-[4-(diphenylmethyl)-1-piperazinyl]nonyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 24 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:790476 HCAPLUS

DOCUMENT NUMBER: 133:350248

TITLE: Preparation of piperazine derivatives useful as CCR5 antagonists

INVENTOR(S): Baroudy, Bahige M.; Clader, John W.; Josien, Hubert B.; McCombie, Stuart W.; Mckittrick, Brian A.; Miller, Michael W.; Neustadt, Bernard R.; Palani, Anandan; Smith, Elizabeth M.; Steensma, Ruof; Tagat, Jayaram R.; Vice, Susan F.; Laughlin, Mark A.; Gilbert, Eric; Labroli, Marc A.

PATENT ASSIGNEE(S): Schering Corporation, USA; et al.

SOURCE: PCT Int. Appl., 109 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

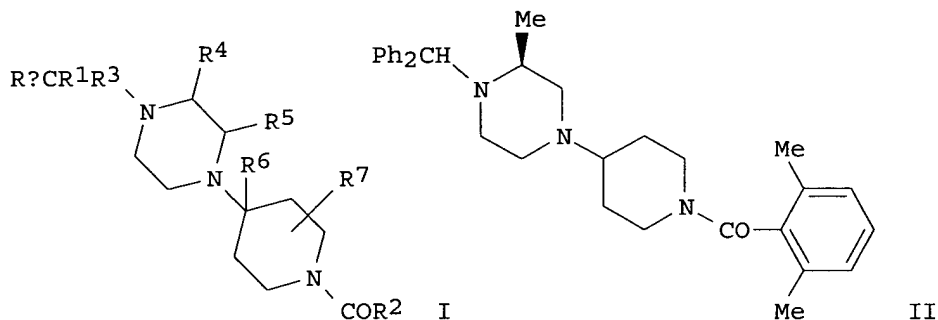
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000066558	A1	20001109	WO 2000-US11632	20000501
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, HR, HU, ID, IL, IN, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LU, LV, MA, MD, MG, MK, MN, MX, NO, NZ, PL, PT, RO, RU, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, US, UZ, VN, YU, ZA				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2371583	AA	20001109	CA 2000-2371583	20000501
CA 2371583	C	20050913		
EP 1175401	A1	20020130	EP 2000-926486	20000501
EP 1175401	B1	20050720		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				

		IE, SI, LT, LV, FI, RO			
BR 2000010304	A	20020213	BR 2000-10304		20000501
TR 200103214	T2	20020321	TR 2001-200103214		20000501
AU 780888	B2	20050421	AU 2000-45009		20000501
AT 299865	E	20050815	AT 2000-926486		20000501
JP 3722700	B2	20051130	JP 2000-615389		20000501
ZA 2001008868	A	20030127	ZA 2001-8868		20011026
NO 2001005366	A	20020103	NO 2001-5366		20011102
HK 1039930	A1	20051209	HK 2002-100824		20020202
PRIORITY APPLN. INFO.:			US 1999-305226	A2	19990504
			US 1999-305266	A	19990504
			WO 2000-US11632	W	20000501
OTHER SOURCE(S):		MARPAT 133:350248			
GI					



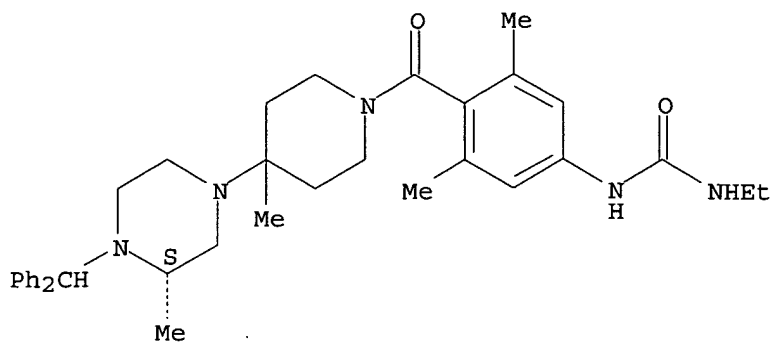
AB The title compds. I [Ra = optionally substituted Ph, pyridyl, thiophenyl, naphthyl; R<sub>1</sub> = H, alkyl; R<sub>2</sub> = substituted Ph, substituted heteroaryl, naphthyl, fluorenyl, diphenylmethyl or optionally substituted phenyl- or heteroarylalkyl; R<sub>3</sub> = H, alkyl, alkoxyalkyl, cycloalkyl, cycloalkylalkyl, or optionally substituted Ph, phenylalkyl, naphthyl, naphthylalkyl, heteroaryl, heteroarylalkyl; R<sub>4</sub>, R<sub>5</sub>, R<sub>7</sub> = H, alkyl; R<sub>6</sub> = H, alkyl, alkenyl], CCR5 antagonists, were prepared E.g., piperazine derivative II was prepared

IT **306296-55-9P 306296-59-3P**  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of piperazine derivs. useful as CCR5 antagonists)

RN 306296-55-9 HCAPLUS

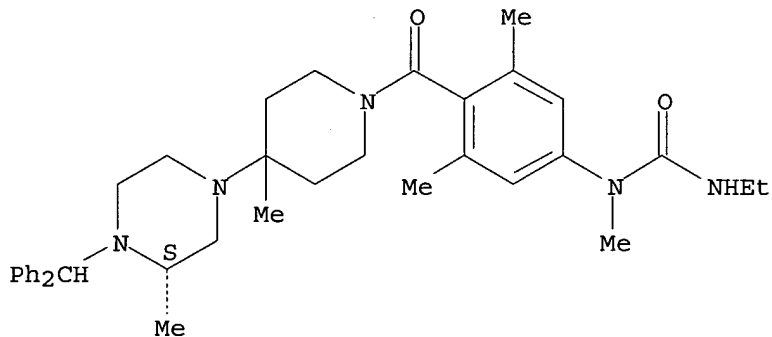
CN Piperidine, 4-[(3S)-4-(diphenylmethyl)-3-methyl-1-piperazinyl]-1-[4-[[ethylamino)carbonyl]amino]-2,6-dimethylbenzoyl]-4-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 306296-59-3 HCAPLUS  
 CN Piperidine, 4-[(3S)-4-(diphenylmethyl)-3-methyl-1-piperazinyl]-1-[4-  
 [[(ethylamino)carbonyl]methylanino]-2,6-dimethylbenzoyl]-4-methyl- (9CI)  
 (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 25 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1999:53389 HCAPLUS  
 DOCUMENT NUMBER: 130:139358  
 TITLE: Preparation and formulation of tricyclic compounds  
 useful for inhibition of farnesyl protein transferase  
 INVENTOR(S): Taveras, Arthur G.; Mallams, Alan K.; Afonso, Adriano;  
 Remiszewski, Stacy W.; Njoroge, F. George; Doll,  
 Ronald; Lalwani, Tarik; Alvarez, Carmen  
 PATENT ASSIGNEE(S): Schering Corporation, USA  
 SOURCE: U.S., 71 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5861395	A	19990119	US 1997-927469	19970911
PRIORITY APPLN. INFO.:			US 1997-927469	19970911
OTHER SOURCE(S):	MARPAT	130:139358		

GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The title compds., e.g., I [W = cyano, etc.; R1 = H, halo, etc.; R3, R4 = H, halo, CF3, etc.; or R3R4 = saturated or unsatd. C5 - C7 fused ring to the benzene ring; X represents N, CH, or C, which C may contain an optional double bond (represented by the dotted line); dotted line represents an optional double bond; when such a double bond is present between the two C atoms bearing A and B, A and B independently represent R10, halo, etc.; when no such double is present, A and B each independently represent H2, (OR11)2, H and halo, dihalo, etc.; R10 = H, alkyl, etc.; R11 = alkyl, aryl ] are prepared The title compound II in vitro showed IC50 of 0.1  $\mu$ M against farnesyl protein transferase.

IT 204712-16-3P 204712-17-4P 204712-59-4P

204712-60-7P 204712-66-3P 204712-67-4P

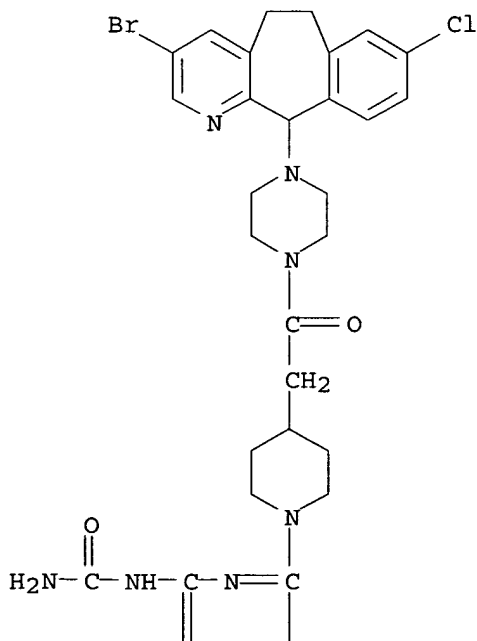
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of tricyclic compds. useful for inhibition of farnesyl protein transferase)

RN 204712-16-3 HCAPLUS

CN 1-Piperidinecarboximidic acid, N-[[[(aminocarbonyl)amino]carbonyl]-4-[2-[4-(3-bromo-8-chloro-6,11-dihydro-5H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl)-1-piperazinyl]-2-oxoethyl]-, phenyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

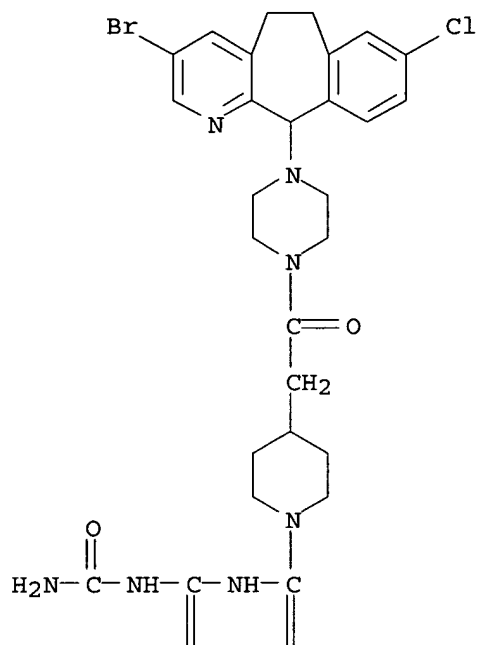


PAGE 2-A



RN 204712-17-4 HCAPLUS  
CN Piperazine, 1-[[1-[[[(aminocarbonyl)amino]carbonyl]amino]iminomethyl]-4-piperidinyl]acetyl]-4-(3-bromo-8-chloro-6,11-dihydro-5H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl)-(9CI) (CA INDEX NAME)

PAGE 1-A

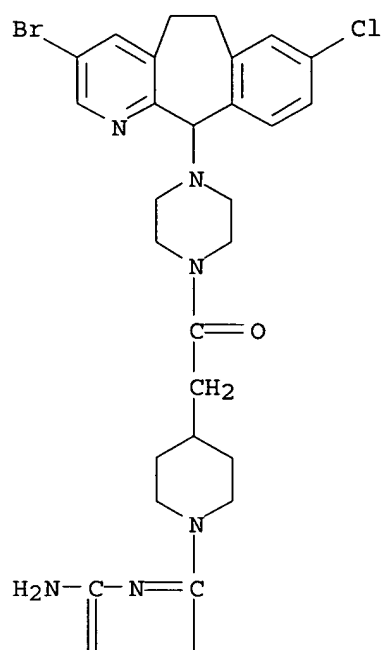


PAGE 2-A



RN 204712-59-4 HCAPLUS  
CN 1-Piperidinecarboximidic acid, N-(aminocarbonyl)-4-[2-[4-(3-bromo-8-chloro-6,11-dihydro-5H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl)-1-piperazinyl]-2-oxoethyl]-, phenyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



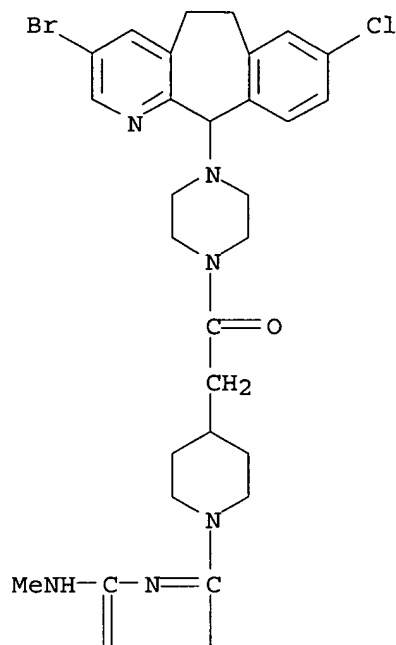
PAGE 2-A



RN 204712-60-7 HCAPLUS  
 CN 1-Piperidinecarboximidic acid, 4-[2-[4-(3-bromo-8-chloro-6,11-dihydro-5H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl)-1-piperazinyl]-2-oxoethyl]-N-[(methylamino)carbonyl]-, phenyl ester (9CI) (CA INDEX NAME)



PAGE 1-A

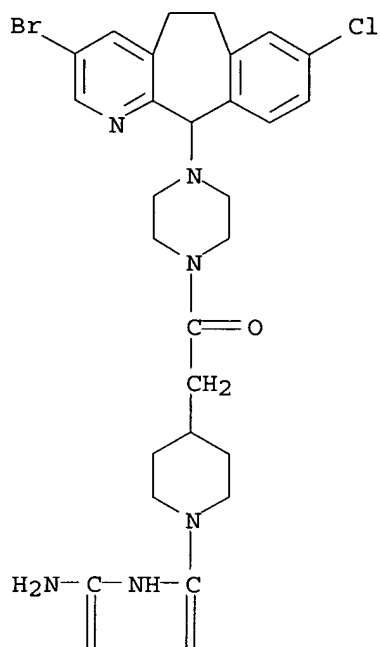


PAGE 2-A



RN 204712-66-3 HCAPLUS  
 CN Piperazine, 1-[[1-[[[(aminocarbonyl)amino]iminomethyl]-4-piperidinyl]acetyl]-4-(3-bromo-8-chloro-6,11-dihydro-5H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl)-(9CI) (CA INDEX NAME)

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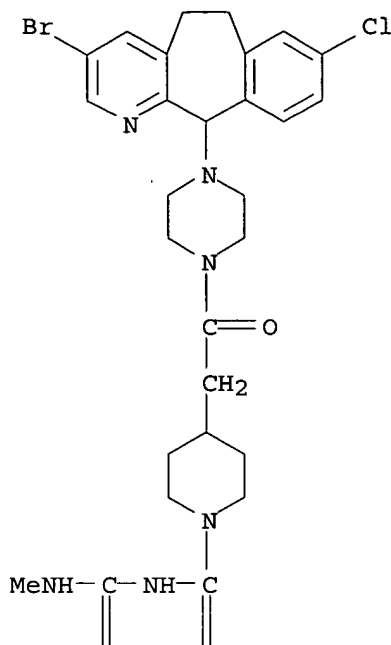


PAGE 2-A



RN 204712-67-4 HCAPLUS  
 CN Piperazine, 1-(3-bromo-8-chloro-6,11-dihydro-5H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl)-4-[[1-[imino[[ (methylamino) carbonyl] amino] methyl]-4-piperidinyl]acetyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 26 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:180864 HCAPLUS

DOCUMENT NUMBER: 128:230251

TITLE: Preparation of benzocycloheptapyridines as farnesyl protein transferase inhibitors

INVENTOR(S): Taveras, Arthur G.; Mallams, Alan K.; Afonso, Adriano; Remiszewski, Stacy W.; Njoroge, F. George; Doll, Ronald J.; Lalwani, Tarik; Alvarez, Carmen

PATENT ASSIGNEE(S): Schering Corp., USA

SOURCE: PCT Int. Appl., 147 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9811091	A2	19980319	WO 1997-US19976	19970911
WO 9811091	A3	19980611		

W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CZ, EE, GE, HU, ID,

IL, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX,  
NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UZ, VN,  
YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR,  
GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA,  
GN, ML, MR, NE, SN, TD, TG

CA 2266014	AA	19980319	CA 1997-2266014	19970911
AU 9851966	A1	19980402	AU 1998-51966	19970911
EP 934303	A2	19990811	EP 1997-946875	19970911
EP 934303	B1	20041229		

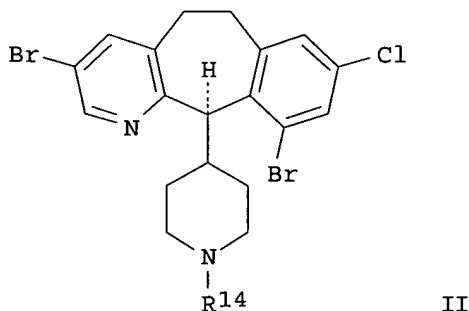
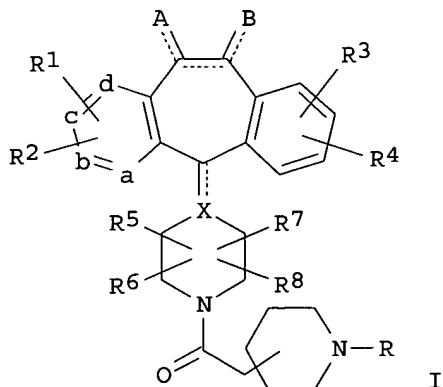
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE,  
LT, LV, FI, RO

CN 1237164	A	19991201	CN 1997-199597	19970911
BR 9712980	A	20000418	BR 1997-12980	19970911
NZ 334454	A	20000825	NZ 1997-334454	19970911
JP 2001500515	T2	20010116	JP 1998-514032	19970911
AT 286044	E	20050115	AT 1997-946875	19970911
ES 2234036	T3	20050616	ES 1997-946875	19970911
NO 9901235	A	19990510	NO 1999-1235	19990312
KR 2000036110	A	20000626	KR 1999-702133	19990312

PRIORITY APPLN. INFO.:

US 1996-713297	A	19960913
US 1997-877453	A	19970617
WO 1997-US19976	W	19970911

OTHER SOURCE(S): MARPAT 128:230251  
GI



AB Title compds. [I; 1 of a,b,c,d = N or NR9 and the others = CR1 or CR2; A,B = halo, R10, OR11, H2, H and halo, H and alkyl, etc.; R1-R4 = H, halo, alkoxy, (di)alkylamino, etc.; R3R4 = atoms to complete a ring; R5-R8 = H, (alkoxy)alkyl, alkanoyl, aryl, etc.; R9 = oxido, Me, (CH2)nCO2H; R10 = H, (ar)alkyl, aryl; R11 = alkyl or aryl; X = N, C, CH; n = 1-3; R = cyano, COR12, C(:NR13)OR14, C(:NR13)NR10R16, etc.; R12 = H, alkyl, heterocyclyl, etc.; R13 = H, cyano, alkylsulfonyl, alkanoyl, (un)substituted SO2NH2, etc.; R14 = aryl; R16 = (cyclo)alkyl, (hetero)aryl(alkyl), heterocyclylalkyl] were prepared Thus, title compound II (R14 = H) was N-acylated with PhOCN to give II (R14 = 1-phenoxy-carbonimidoylpiperidine-4-acetyl). Data for biol. activity of I were given.

IT 204712-16-3P 204712-17-4P 204712-59-4P  
204712-60-7P 204712-66-3P 204712-67-4P

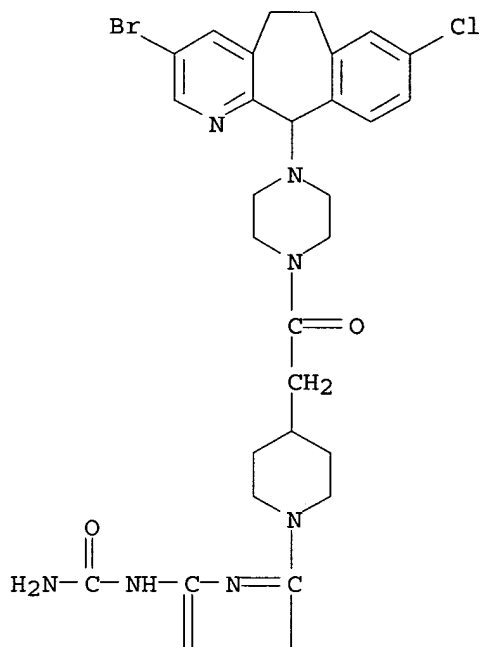
RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);  
BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of benzocycloheptapyridines as farnesyl protein transferase  
inhibitors)

RN 204712-16-3 HCAPLUS

CN 1-Piperidinecarboximidic acid, N-[[[(aminocarbonyl)amino]carbonyl]-4-[2-[4-(3-bromo-8-chloro-6,11-dihydro-5H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl)-1-piperazinyl]-2-oxoethyl]-, phenyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



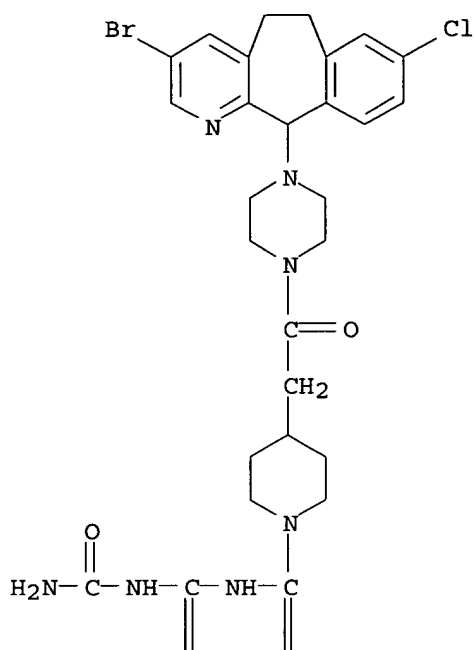
PAGE 2-A



RN 204712-17-4 HCAPLUS

CN Piperazine, 1-[[[1-[[[[[(aminocarbonyl)amino]carbonyl]amino]iminomethyl]-4-piperidinyl]acetyl]-4-(3-bromo-8-chloro-6,11-dihydro-5H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl)- (9CI) (CA INDEX NAME)

PAGE 1-A

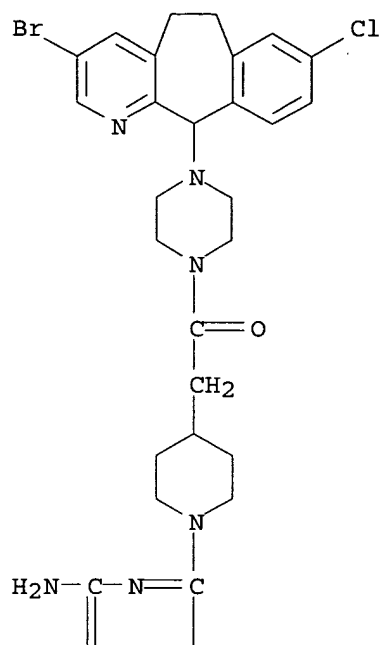


PAGE 2-A



RN 204712-59-4 HCAPLUS  
 CN 1-Piperidinecarboximidic acid, N-(aminocarbonyl)-4-[2-[4-(3-bromo-8-chloro-6,11-dihydro-5H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl)-1-piperazinyl]-2-oxoethyl]-, phenyl ester (9CI) (CA INDEX NAME)

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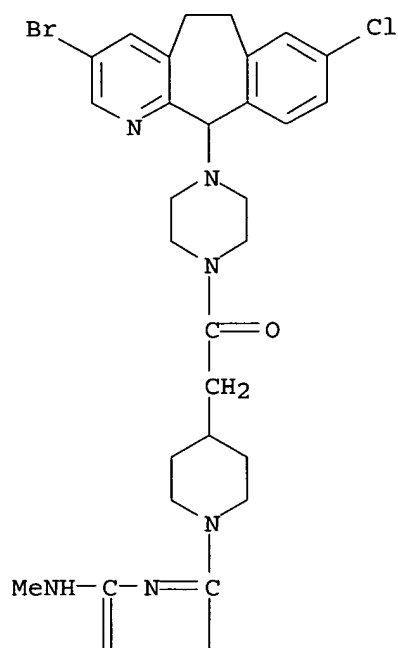


PAGE 2-A



RN 204712-60-7 HCAPLUS  
 CN 1-Piperidinecarboximidic acid, 4-[2-[4-(3-bromo-8-chloro-6,11-dihydro-5H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl)-1-piperazinyl]-2-oxoethyl]-N-[(methylamino)carbonyl]-, phenyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



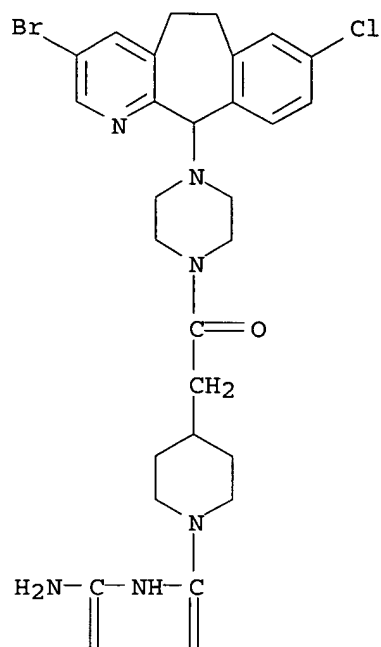
PAGE 2-A



RN 204712-66-3 HCAPLUS  
 CN Piperazine, 1-[[1-[[[(aminocarbonyl)amino]iminomethyl]-4-piperidinyl]acetyl]-4-(3-bromo-8-chloro-6,11-dihydro-5H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl)-(9CI) (CA INDEX NAME)



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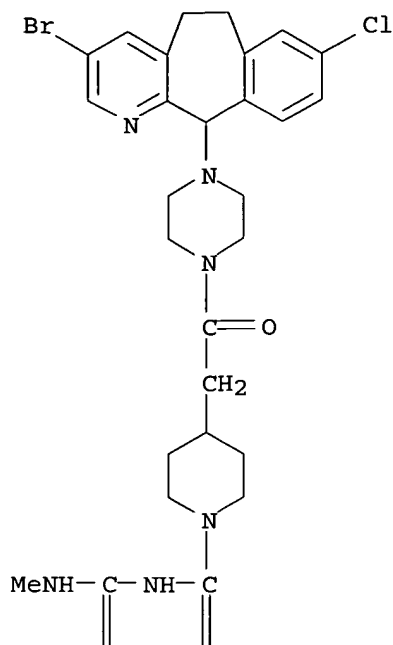


PAGE 2-A



RN 204712-67-4 HCAPLUS  
 CN Piperazine, 1-(3-bromo-8-chloro-6,11-dihydro-5H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl)-4-[[1-[imino[(methylamino)carbonyl]amino]methyl]-4-piperidinyl]acetyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



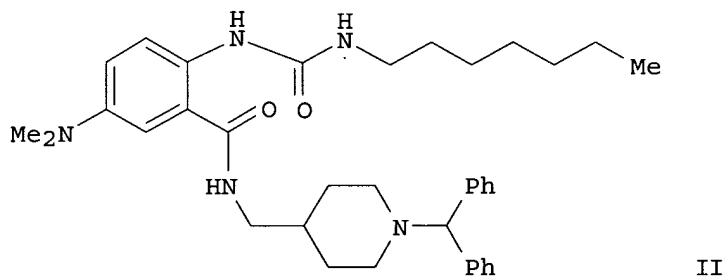
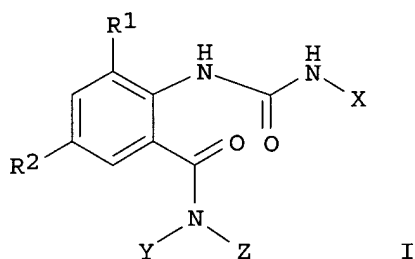
PAGE 2-A



L15 ANSWER 27 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1997:9205 HCAPLUS  
 DOCUMENT NUMBER: 126:47112  
 TITLE: 2-Ureidobenzamide derivatives useful as  
 acyl-CoA:cholesterol acyltransferase inhibitors  
 INVENTOR(S): Binet, Jean; Guffroy, Christian; Kasai, Hirotaka;  
 Wagatsuma, Nagatoshi  
 PATENT ASSIGNEE(S): Grelan Pharmaceutical Co., Ltd., Japan; Laboratoires  
 Fournier SA  
 SOURCE: Eur. Pat. Appl., 32 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 742208	A1	19961113	EP 1995-401049	19950505
R: FR				
CA 2194481	AA	19961107	CA 1996-2194481	19960427
WO 9634856	A1	19961107	WO 1996-EP1836	19960427
W: AU, CA, HU, JP, KR, NO, US				

RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE  
 AU 9657635 A1 19961121 AU 1996-57635 19960427  
 EP 769007 A1 19970423 EP 1996-914173 19960427  
 R: BE, CH, DE, DK, ES, FI, FR, GB, IE, IT, LI, NL, SE  
 JP 10506922 T2 19980707 JP 1996-533007 19960427  
 JP 10120644 A2 19980512 JP 1996-295968 19961018  
 NO 9605459 A 19961218 NO 1996-5459 19961218  
 US 5872115 A 19990216 US 1996-765314 19961230  
 PRIORITY APPLN. INFO.: EP 1995-401049 A 19950505  
 WO 1996-EP1836 W 19960427  
 OTHER SOURCE(S): MARPAT 126:47112  
 GI



AB The invention relates to 2-ureidobenzamide compds. I [R1 = H, halo, alkyl, alkoxy, dialkylamino; R2 = H, halo, OH, nitro, alkyl, alkoxy, or (CH2)0-2NR3R4; R3, R4 = H, alkyl, alkylsulfonyl, alkylcarbamoyl; or NR3R4 form pyrrolidine, piperidine, morpholine, imidazole, or pyrazole ring; X = alkyl or (CH2)1-4NR5R6; R5, R6 = H, alkyl, alkoxy carbonyl; Y = H, alkyl; Z = N-substituted pyrrolidinyl or piperidinyl radicals with an optional alkylene or (cyclo)alkylidene linker; or NYZ = imidazolidino or (homo)piperazino bearing a Ph, CHPh2, or (un)substituted dibenzocycloheptenyl group on the second N atom] and their pharmaceutically acceptable acid addn salts. The compds. are acyl-CoA:cholesterol acyltransferase (ACAT) inhibitors, useful for the prevention and treatment of disorders and diseases such as atherosclerosis. Examples include 61 syntheses and 2 standard formulations. For instance, amidation of 5-(dimethylamino)-2-nitrobenzoic acid with 4-(aminomethyl)-1-(diphenylmethyl)piperidine (47%), hydrogenation of the nitro group (100%), N-acylation of the resultant amino group with ClCO2Ph, and aminolysis of the carbamate with n-heptylamine (62%), gave title compound II. The IC50 of II for ACAT inhibition from 2 in vitro bioassays (microsome and intact cell) was 0.6 and 0.007  $\mu$ M, resp., and the activity in a mouse peritoneal macrophage assay was higher than the known

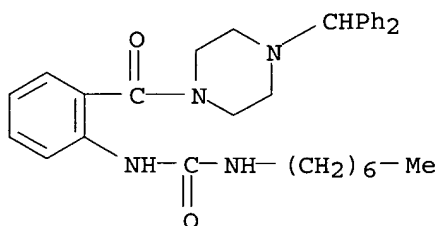
compds. E5324 and CI976.

IT 184780-04-9P 184780-19-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of ureidobenzamide derivs. as ACAT inhibitors)

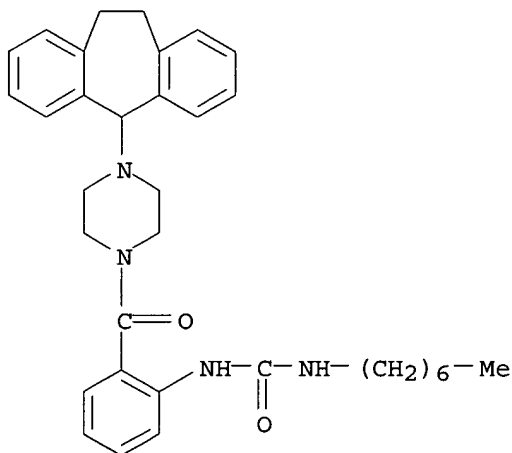
RN 184780-04-9 HCAPLUS

CN Piperazine, 1-(diphenylmethyl)-4-[2-[[ (heptylamino) carbonyl] amino] benzoyl]-  
(9CI) (CA INDEX NAME)



RN 184780-19-6 HCAPLUS

CN Piperazine, 1-(10,11-dihydro-5H-dibenzo[a,d]cyclohepten-5-yl)-4-[2-[[ (heptylamino) carbonyl] amino] benzoyl]- (9CI) (CA INDEX NAME)



L15 ANSWER 28 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1995:926097 HCAPLUS

DOCUMENT NUMBER: 123:340182

TITLE: Preparation of hydroxamic acid derivative for inhibiting proliferation of smooth muscle cells and medicinal preparation containing the same

INVENTOR(S): Isozaki, Masashi; Kasukawa, Hiroaki; Nakazawa, Keiichi; Houki, Keiko

PATENT ASSIGNEE(S): Terumo K K, Japan

SOURCE: PCT Int. Appl., 34 pp.

CODEN: PIXXD2

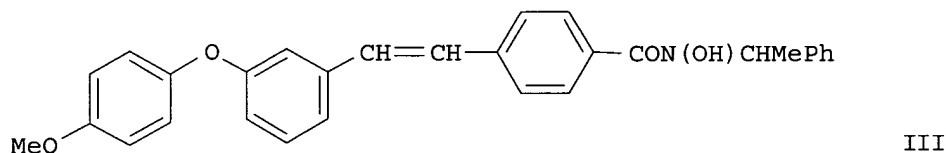
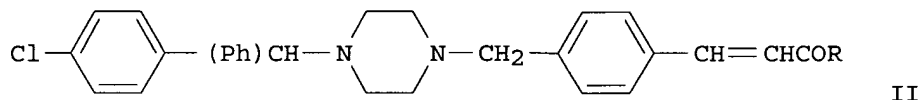
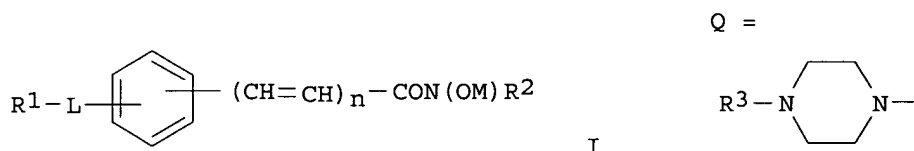
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9513264	A1	19950518	WO 1994-JP1870	19941104
W: US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
JP 07278086	A2	19951024	JP 1994-251094	19941017
PRIORITY APPLN. INFO.:			JP 1993-278168	A 19931108
			JP 1994-22475	A 19940221
OTHER SOURCE(S):		MARPAT 123:340182		
GI				



AB Hydroxamic acid derivs. [I; R<sup>1</sup> = Ph, aryloxyphenyl, Q; wherein R<sup>3</sup> = aryl or aryl-C1-4 alkyl; L = C1-8 alkylene, C2-8 alkenylene, (CH<sub>2</sub>)<sub>m</sub>O (wherein m = an integer 0-4), CO; n = 0 or 1; R<sup>2</sup> = H, C1-4 alkyl, aryl-C1-4 alkyl; M = H, alkanoyl, alkoxy-carbonyl, a medicinally acceptable cation], having the effect of suppressing smooth muscle fiber growth and useful as vascular wall thickening preventives, post-percutaneous transluminal coronary angioplasty (PTCA) restenosis preventives, and even antiarteriosclerotic agents, are prepared. Thus, cinnamic acid derivative (II; R = OH) was stirred with oxalyl chloride and DMF in CH<sub>2</sub>Cl<sub>2</sub> for 2h and the reaction solution was added dropwise to a solution of N-methylhydroxylamine hydrochloride and Et<sub>3</sub>N in aqueous THF, followed by stirring the resulting mixture at room temperature for 2 h

to give 62.3% N-hydroxy-p-piperazinylmethylcinnamamide II (R = NMeOH). This compound and N-hydroxybenzamide derivative (III) in vitro showed IC<sub>50</sub> of 2.0 + 10<sup>-7</sup> mol for specifically inhibiting the proliferation of smooth muscle cells of a rat thoracic aorta.

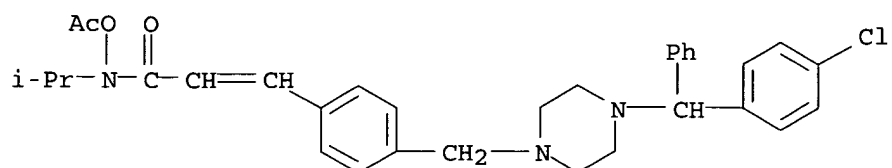
IT 170429-94-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate for preparation of hydroxamic acid derivative for inhibiting proliferation of smooth muscle cells)

RN 170429-94-4 HCAPLUS

CN 2-Propenamide, N-(acetyloxy)-3-[4-[[4-[(4-chlorophenyl)phenylmethyl]-1-piperazinyl]methyl]phenyl]-N-(1-methylethyl)- (9CI) (CA INDEX NAME)

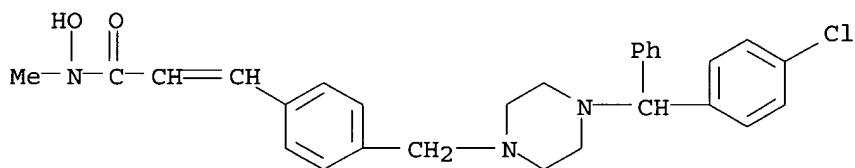


IT 170429-91-1P 170429-92-2P 170429-93-3P  
170429-94-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of hydroxamic acid derivative for inhibiting proliferation of smooth muscle cells)

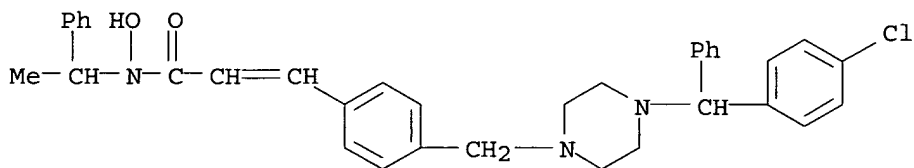
RN 170429-91-1 HCAPLUS

CN 2-Propenamide, 3-[4-[4-[4-(4-chlorophenyl)phenylmethyl]-1-piperazinyl]methyl]phenyl]-N-hydroxy-N-methyl- (9CI) (CA INDEX NAME)



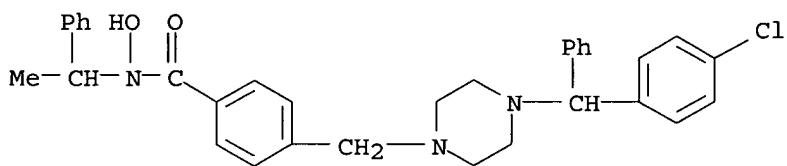
RN 170429-92-2 HCAPLUS

CN 2-Propenamide, 3-[4-[4-[4-(4-chlorophenyl)phenylmethyl]-1-piperazinyl]methyl]phenyl]-N-hydroxy-N-(1-phenylethyl)- (9CI) (CA INDEX NAME)



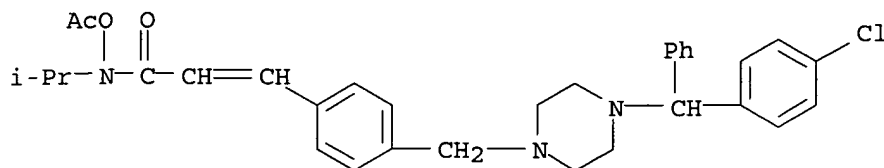
RN 170429-93-3 HCAPLUS

CN Benzamide, 4-[4-[4-[4-(4-chlorophenyl)phenylmethyl]-1-piperazinyl]methyl]-N-hydroxy-N-(1-phenylethyl)- (9CI) (CA INDEX NAME)



RN 170429-94-4 HCAPLUS

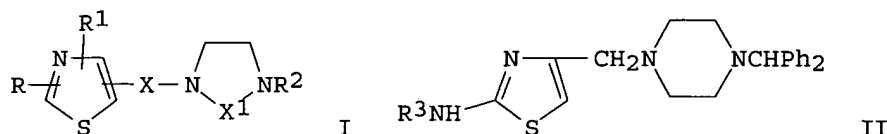
CN 2-Propenamide, N-(acetyloxy)-3-[4-[4-[4-(4-chlorophenyl)phenylmethyl]-1-piperazinyl]methyl]phenyl]-N-(1-methylethyl)- (9CI) (CA INDEX NAME)



L15 ANSWER 29 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1981:569217 HCAPLUS  
 DOCUMENT NUMBER: 95:169217  
 TITLE: Thiazole derivatives and pharmaceutical composition comprising them  
 INVENTOR(S): Ueda, Ikuo; Morino, Daizou; Takimoto, Koichi  
 PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan  
 SOURCE: Eur. Pat. Appl., 64 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 32058	A1	19810715	EP 1980-304740	19801229
EP 32058	B1	19831026		
R: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
US 4411900	A	19831025	US 1980-215372	19801211
CA 1154764	A1	19831004	CA 1980-367494	19801223
JP 56103168	A2	19810818	JP 1980-189341	19801229
JP 01014229	B4	19890310		
AT 5138	E	19831115	AT 1980-304740	19801229
PRIORITY APPLN. INFO.:			GB 1980-162	A 19800103
			EP 1980-304740	A 19801229

GI



AB Aminoalkylthiazoles I (X = alkylene, thiaalkylene; X1 = C1-3 alkylene; R = H, amino; R1 = H, halogen, alkyl, aryl; R2 = aralkyl, haloaralkyl) were prepared 2-Acetamido-4-chloromethylthiazole was treated with 1-benzhydrylpiperazine to give II (R3 = Ac), which was deacetylated and mesylated to give II (R3 = MeSO2). At 1 mg/kg orally in guinea pigs II (R3 = MeSO2) gave 100% inhibition of anaphylactic asthma.

IT 79387-40-9P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

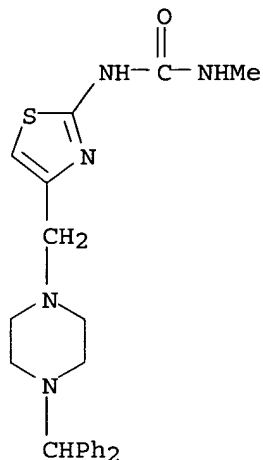
RN 79387-40-9 HCAPLUS

CN Urea, N-[4-[[4-(diphenylmethyl)-1-piperazinyl]methyl]-2-thiazolyl]-N'-methyl-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 79387-39-6

CMF C23 H27 N5 O S

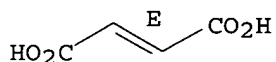


CM 2

CRN 110-17-8

CMF C4 H4 O4

Double bond geometry as shown.



L15 ANSWER 30 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1981:550706 HCAPLUS

DOCUMENT NUMBER: 95:150706

TITLE: Piperazine derivative, processes for the preparation thereof, and pharmaceutical composition comprising the same

INVENTOR(S): Teraji, Tsutomu; Oku, Teruo; Namiki, Takayuki

PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan

SOURCE: Brit. UK Pat. Appl., 14 pp.

CODEN: BAXXDU

DOCUMENT TYPE: Patent

LANGUAGE: English

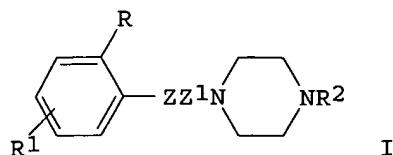
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2056968	A	19810325	GB 1979-29092	19790821
JP 56032474	A2	19810401	JP 1980-115296	19800820
PRIORITY APPLN. INFO.:			GB 1979-29092	A 19790821

GI





AB Piperazines I [R = CO<sub>2</sub>H, CO<sub>2</sub>H derivative, acylamino; R<sub>1</sub> = H, halo, alkyl, alkoxy, aryl, acylamino; R<sub>2</sub> = aralkyl; Z = NR<sub>3</sub>, O, S, NHCO (R<sub>3</sub> = H, acyl); Z<sub>1</sub> = alkylene], and their pharmaceutically acceptable salts, having antiallergic activity, were prepared E. g., a solution of

1-[3-(4-benzhydryl-1-piperazinyl)propyl]isatin in N aqueous NaOH and THF was treated by dropwise addition of 15% aqueous H<sub>2</sub>O<sub>2</sub> at room temperature and the mixture was stirred 5 h at

70°, cooled to room temperature, treated with Na<sub>2</sub>SO<sub>3</sub> (pH 1, 10% HCl), diluted with EtOAc, adjusted to pH 9 (aqueous NaHCO<sub>3</sub>), and stirred 0.5 h to give

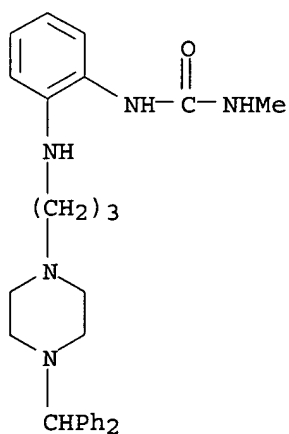
I [R = CO<sub>2</sub>H, R<sub>1</sub> = H, R<sub>2</sub> = CHPh<sub>2</sub>, Z = NH, Z<sub>1</sub> = (CH<sub>2</sub>)<sub>3</sub>] (II). A 10 mg/kg p.o. dose of II produced complete inhibition of anaphylactic asthma in guinea pigs.

IT 79310-69-3P 79310-72-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of, as allergy inhibitor)

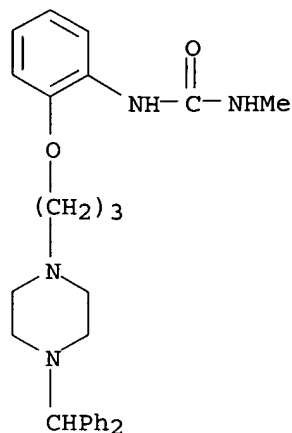
RN 79310-69-3 HCAPLUS

CN Urea, N-[2-[[3-[4-(diphenylmethyl)-1-piperazinyl]propyl]amino]phenyl]-N'-methyl- (9CI) (CA INDEX NAME)



RN 79310-72-8 HCAPLUS

CN Urea, N-[2-[3-[4-(diphenylmethyl)-1-piperazinyl]propoxy]phenyl]-N'-methyl- (9CI) (CA INDEX NAME)



L15 ANSWER 31 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1979:54975 HCAPLUS

DOCUMENT NUMBER: 90:54975

TITLE: 5-[4-(Diarylmethyl)-1-piperazinylalkyl]benzimidazole derivatives

INVENTOR(S): Raeymaekers, Alfons H. M.; Van Gelder, Josephus L. H.; Boeckx, Gustaaf M.; Van Hemeldonck, Lodewijk L.

PATENT ASSIGNEE(S): Janssen Pharmaceutica N. V., Belg.

SOURCE: Ger. Offen., 68 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

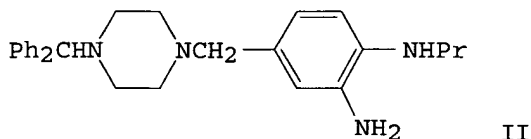
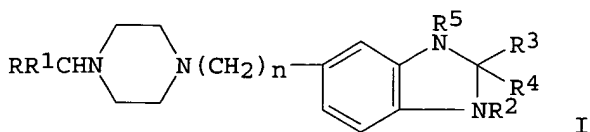
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2813523	A1	19781005	DE 1978-2813523	19780329
US 4179505	A	19791218	US 1978-866882	19780104
CA 1119597	A1	19820309	CA 1978-298497	19780308
SE 7803057	A	19781001	SE 1978-3057	19780316
FR 2385713	A1	19781027	FR 1978-7675	19780316
FR 2385713	B1	19831223		
ES 468077	A1	19790901	ES 1978-468077	19780320
AU 7834313	A1	19790927	AU 1978-34313	19780320
AU 517661	B2	19810820		
BE 865110	A2	19780921	BE 1978-186107	19780321
GB 1598278	A	19810916	GB 1978-11524	19780322
DK 7801358	A	19781001	DK 1978-1358	19780328
IL 54373	A1	19820331	IL 1978-54373	19780328
FI 7800954	A	19781001	FI 1978-954	19780329
NL 7803312	A	19781003	NL 1978-3312	19780329
NO 7801078	A	19781003	NO 1978-1078	19780329
JP 53141287	A2	19781208	JP 1978-35366	19780329
JP 63039591	B4	19880805		
ZA 7801789	A	19791128	ZA 1978-1789	19780329
PL 118310	B1	19810930	PL 1978-205650	19780329
AT 7802209	A	19820115	AT 1978-2209	19780329
AT 368136	B	19820910		
SU 986297	A3	19821230	SU 1978-2595004	19780329
HU 22951	O	19820728	HU 1978-JA815	19780330

HU 180477	B	19830328		
US 4243806	A	19810106	US 1979-48216	19790613
PRIORITY APPLN. INFO.:			US 1977-782651	A 19770330
			US 1978-866882	A 19780104

GI



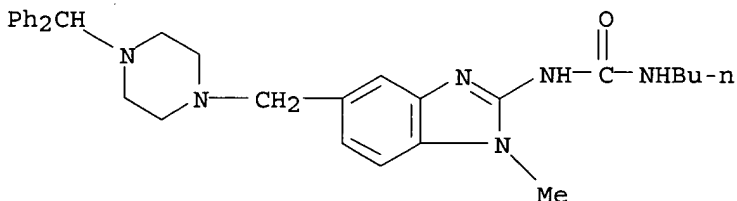
AB The benzimidazole derivs. I [R = R1 = thienyl, pyridyl, Ph optionally substituted by H, NO2, alkyl, alkoxy; R2 = H, alkyl, cycloalkyl, aralkyl, (esterified or etherified) hydroxy- or mercaptoalkyl, haloalkyl; R3 = R2, R4R5 = bond; R3R4 = O, R5 = H; n = 1, 2 ] and their salts were prepared for use as antihistaminics at 0.0025-0.16 mg/mL in vitro and as antianaphylactics at 2.5 mg/kg in vivo. Thus, II (prepared by the reaction of 4,3-Cl(O2N)C6H3CH2Cl with 1-(diphenylmethyl)piperazine, followed by N-alkylation and reduction) reacted with MeC(OEt)3 in HOAc to give I (R = R1 = Ph, R2 = Pr, R3 = H, R4R5 = bond, n = 1).

IT 68732-82-1P 68732-83-2P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

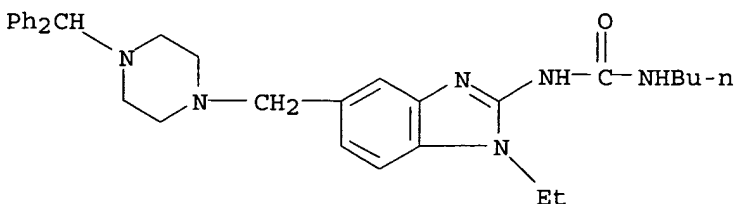
RN 68732-82-1 HCAPLUS

CN Urea, N-butyl-N'-[5-[[4-(diphenylmethyl)-1-piperazinyl]methyl]-1-methyl-1H-benzimidazol-2-yl]- (9CI) (CA INDEX NAME)



RN 68732-83-2 HCAPLUS

CN Urea, N-butyl-N'-[5-[[4-(diphenylmethyl)-1-piperazinyl]methyl]-1-ethyl-1H-benzimidazol-2-yl]- (9CI) (CA INDEX NAME)



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